FLUKE®

2018–2019

Test Tools Catalog

70

1948–2018

1948 - 2018

Years of innovation

Fluke's first 70 years

Keeping your world up and running.

Ever since our first meter in 1948, Fluke technologies have helped shape the nature of electrical testing and troubleshooting.
Our instruments are in the toolboxes of professionals across the world—people who stake their reputations on their measurements.
Seventy years' of innovation have established our reputation for rugged, safe, easy to use and top quality portable tools.

Why choose Fluke?

- With 70 years of innovation, Fluke tools are designed with you in mind.
- Fluke tools are known for portability, ruggedness, safety ease of use, accuracy and rigid standards of quality.
- Our service team offers a range of capabilities beyond repairing and calibrating your instrument.
- We help you keep up on the latest technologies and safety standards with hands-on seminars, online trainings and quick reads.
- Over 40 of our tools now use the Fluke Connect® app and online dashboard to help you save and share data, act on events, and increase workplace safety.

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New Products

NEW PRODUCTS

Fluke T6 Electrical Tester

Measure voltage … without test leads

Working in electrical boxes jammed with wires can be challenging when you're trying to find a safe metallic contact point. Now, with Fluke's T6-600 or T6-1000 with integrated FieldSense technology, you can quickly and easily take measurements by sliding the open fork over a conductor to see the voltage level without the need for test leads.

How FieldSense Works

While other open fork testers detect a magnetic field to show ac current, FieldSense technology detects an electrical field. This field interacts with a reference signal created by the T6 tester, creating a voltage value on the tester's display.

Product Highlights

- Be safer: Measure voltage to 1000 V ac through the open fork, without test leads.
- Be faster: No need to open covers or remove wire nuts.
- Be more efficient: Simultaneously measure voltage and current.
- Be everywhere: 17.8 mm open fork is widest in the industry; measure up to 200 A on 4/0 wires (120 mm2).
- Go beyond simple detection. Actually measure ac voltage and current values without test leads.

Learn more about this product on page 50 >>

NEW PRODUCTS

Fluke 1732 and 1734 Power Loggers

The Fluke 1732 and 1734 Three-Phase Electrical Energy loggers introduce a new simplicity to discovering sources of electrical energy waste. Discover when and where energy in your facility is being consumed; from the service entrance to individual circuits. Access and share data remotely with your team via the Fluke Connect® app so you can maintain safer working distances and make critical decisions in real-time, reducing the need for protective equipment, site visits and check-ins.

Profiling energy usage across your facility helps you identify opportunities for energy savings, and provides you with the data you need to act on them. The new Energy Analyze software package allows you to compare multiple data points over time to build a complete picture of energy usage, which is the first step to reduce the cost of your energy bill.

Product Highlights

- Automatically capture key measurements
- Highest safety rating in the industry
- Measure all three phases
- Optimized user interface
- Download and analyze data with automated reporting
- And more!

Learn more about this product on page 81 >>

NEW PRODUCTS

Fluke 1742, 1746 and 1748 Three-Phase Power Quality Loggers

Troubleshoot, quantify energy usage and perform quality of service surveys easier than ever

The Fluke 1742, 1746 and 1748 Three-Phase Power Quality Loggers give you fast, easy access to the data you need to make critical power quality and energy decisions in real-time.

Compact and rugged, the Fluke 1740 Series Three-Phase Power Quality Loggers are designed specifically for technicians and engineers who need the flexibility to troubleshoot, quantify energy usage and analyze power distribution systems. Fully compliant with international power quality standards such as IEC 61000-4-30 and capable of simultaneously logging up to 500 parameters while also capturing events, the Fluke 1740 Series helps uncover intermittent and hard-to-find power quality issues more easily than ever. The included Energy Analyze plus software quickly assesses the quality of power at the service entrance, substation, or at the load, according to national and international standards like EN 50160 and IEEE 519.

An optimized user interface, flexible current probes, and an intelligent measurement verification function that allows you to digitally verify and correct connections makes setup easier than ever and reduces measurement uncertainty. Minimize your time in potentially hazardous environments and reduce the hassle of suiting up in PPE by using a wireless connection (WiFi) to view data directly in the field.

Learn more about this product on page 78 >>

NEW PRODUCTS

Fluke 787B ProcessMeter™

The Fluke 787B ProcessMeter™ doubles troubleshooting capabilities by combining the power of a safety rated digital multimeter and mA loop calibrator into a single, compact test tool

Based on the trusted measurement capabilities of the Fluke 87 DMM, the 787B adds the ability to measure, source and simulate mA with the accuracy and resolution you would expect from a Fluke mA loop calibrator, giving you the ideal tool for troubleshooting and calibrating current loop applications. With Fluke Connect® mobile app and desktop software compatibility technicians can wirelessly monitor, log, and share data from the field with their team anytime, from anywhere*.

*Requires Fluke IR3000FC module (not included). Not all models are available in all countries. Check with your local Fluke representative.

Product Highlights

- 20 mA dc current source/measure/simulate
- Simultaneous mA and % of scale readout
- DMM designed to meet 1000 volt IEC 61010 CAT III and 600 V CAT IV standards
- Frequency measurement to 20 kHz
- Min/Max/Average/Hold/Relative modes
- And more!

Learn more about this product on page 88 >>

NEW PRODUCTS

Fluke 729 Automatic Pressure Calibrator

Portable automatic pressure calibrator simplifies pressure calibration

The Fluke 729 Automatic Pressure Calibrator has been designed specifically with process technicians in mind to simplify the pressure calibration process and provide faster, more accurate test results. Technicians know that calibrating pressure can be a time-consuming task, but the 729 makes it easier than ever with an internal electric pump that provides automatic pressure generation and regulation in an in an easy-to-use, rugged, portable package.

Key features

- Automatic pressure generation and regulation to 300 psi
- Easily document the process using onboard test templates
- Automatic internal fine-pressure adjustment
- Measure, source and simulate 4 to 20 mA signals
- 24V loop power for powering transmitters for tests
- HART communication for testing HART smart transmitters
- And more!

Learn more about this product on page 96 >>

NEW PRODUCTS

Fluke Ti480 PRO and Ti450 PRO Infrared Cameras

100% focused – every object, near and far.

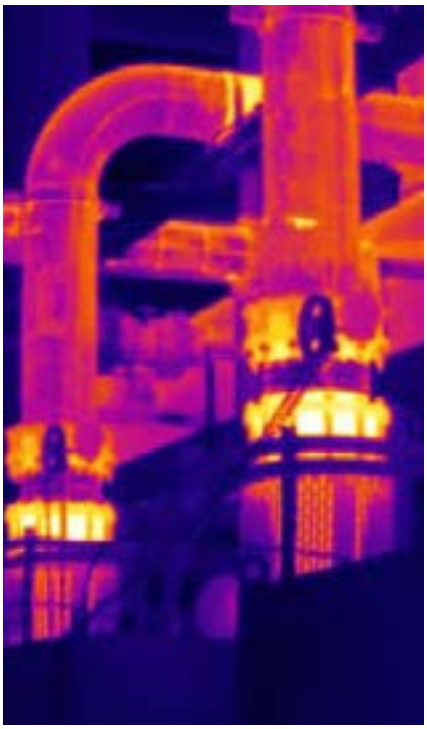
The Fluke PRO series cameras introduce a leading-edge visual infrared experience. Smartest, most intuitive user interface. Increased thermal sensitivity to capture the smallest differences. Latest technology for on-screen clarity. Lens compatibility to capture targets tiny-to-large.

Product Highlights

- Superior image quality on Ti480 PRO infrared camera with 640 x 480 resolution
- More flexibility to visualize targets–tiny to large with interchangeable smart lenses—no calibration required, 2x and 4x telephoto, wide angle and macro lenses are compatible with Ti480 PRO and Ti450 PRO
- Capture a clear, accurate image focused throughout the field of view with MultiSharp™ Focus.
- Get an instant in-focus image of your designated target. LaserSharp® Auto Focus uses a built-in laser distance meter that calculates and displays the distance from your designated target
- Get 4x the pixel data with SuperResolution, which captures multiple images and combines them to create a 1280 x 960 image (Ti480 PRO) or a 640 x 480 image (Ti450 PRO)
- Reduce the need to take notes in the field with two helpful features; IR-PhotoNotes™ and voice annotations
- Increased sensitivity to visualize temperature differences, NETD for the Ti450 PRO is ≤ 0.025 °C at 30 °C target temp (25 mK)

Learn more about this product on page 71 >>

MultiSharp™ Focus produces an image focused throughout the field of view.



NEW PRODUCTS

Fluke Ti450 SF6 Gas Detector

Fluke Ti450 SF6 Gas Leak Detector. Thermal Imager with MultiSharp™ Focus and the added feature of SF_6 gas detection. Get the analysis you need anytime, anywhere.

Increase efficiency and save money with a top performing infrared camera that delivers state-of-the-art SF_6 detection – conduct two critical functions with a single tool. Best of all, it's affordable enough to own, so you can conduct infrared and gas inspections whenever and wherever you want without having to pay heavy rental charges or hire expensive contractors. Two tools in one. At a one of a kind price.

Product Highlights

- Detects the location of the SF_6 leak without shutting down equipment
- Quick entry/exit button allowing quick toggling between gas imaging and infrared mode
- 320 x 240 resolution for gas and infrared images; SuperResolution increases to 640 x 480, only in infrared mode
- Get in-focus images in both infrared and gas modes with a touch of a button with LaserSharp® Auto Focus
- Small and lightweight, fits easily into your tool box
- And more!

Learn more about this product on page 54 >>

NEW PRODUCTS

Fluke TiX580 Thermal Imager

Tablet-sized screen. More details. Faster decisions.

The Fluke TiX580 Thermal Imager delivers stunning 640 x 480 resolution images and surprising affordability. Ideal for field inspection professionals, utility transmission professionals and R&D engineers who require the best to work.

Make decisions in the fields.

- See small details in the image and discover anomalies faster on the 5.7 inch tablet sized touchscreen—the largest in its class
- Edit and analyze images on camera—edit emissivity, enable color alarms and markers, and adjust IR-Fusion® visual and infrared image blending
- Wirelessly sync images directly from your camera to the Fluke Connect® app on your smartphone, and attach to an asset record or work order.

Inspect hard to reach targets.

- Easily maneuver over, under and around objects with the 240° rotating lens while viewing the screen at a comfortable angle
- See the details you need from far away, with interchangeable smart lenses—2x and 4x telephoto, wide angle, and 25 micron macro—no calibration required

Focus near and far in a single image

- Capture a clear, accurate image focused throughout the field of view with MultiSharp™ Focus. Simply point and shoot—the camera automatically processes a stack of images focused near and far
- Get an instant in-focus image of your target. LaserSharp® Auto Focus uses a built-in laser distance meter that calculates and displays the distance from your designated target with pinpoint accuracy
- MATLAB® and LabVIEW® software compatibility allows users to integrate camera data, infrared video and infrared images to support R&D analysis

Learn more about this product on page 70 >>

Get tough shots from any angle with a 240° degree rotating lens and the only 5.7 inch LCD in its class.

NEW PRODUCTS

Fluke 1630-2 FC Earth Ground Clamp

FLUKE CONNECT™

Stakeless earth ground loop and ac leakage current clamp for fast, safe indoor/outdoor earth ground resistance and ac leakage current tests.

Test the grounding components of equipment in hard-to-reach spaces, including areas that are indoors or fully paved and do not permit driving auxiliary test stakes. Stay on line—identify ground loop resistance without the need to disconnect then reconnect the earth electrode from the system.

Product Highlights

- Identify ac leakage currents without disconnecting the earth ground stake from the grounding system–ideal for system troubleshooting.
- Heavy-duty clamp jaw stays in alignment and in calibration even in every day, on-the-job industrial environments.
- The earth ground clamp saves time by automatically recording data at pre-set intervals and saves up to 32,760 measurements in memory at the set logging interval. Saves time by recording and storing measured values.
- User-defined high/low alarm limits, for rapid measurement evaluation.
- Selectable band-pass filter function removes unwanted noise from the ac leakage current measurement.

*** Fluke Connect (FC) is not available in all countries. Non-FC models are available. Check with your local authorized Fluke distributor for more info**

Learn more about this product on page 47 >>

NEW PRODUCTS

FLUKE CONNECT™

Fluke 279 FC True-rms Thermal Multimeter

Fluke 279 FC True-rms Thermal Multimeter helps you find, repair, validate, and report many electrical issues quickly so that you are confident problems are solved.

Thermal imaging multimeters are a first-line troubleshooting tool for electrical equipment that can check hot spots on high-voltage equipment and transformers, and detect heating of fuses, wires, insulators, connectors, splices and switches. Scanning with the 279 FC's thermal imager reveals many electrical issues rapidly and from a safe distance. By combining two tools into one, the thermal multimeter lightens the load and increases productivity.

Product Highlights

- 15 measurement functions including: voltage ac and dc, resistance, continuity, capacitance, diode test, Min/Max/Avg, current ac with included iFlex current probe, frequency
- Low-pass filter for troubleshooting adjustable speed drives
- Thermal imaging reveals hots spots that may indicate electrical issues quickly and safely
- And more!

*** Fluke Connect (FC) is not available in all countries. Non-FC models are available. Check with your local authorized Fluke distributor for more info**

Learn more about this product on page 36 >>

NEW PRODUCTS

Fluke 64 MAX IR Thermometer

Takes the heat, the dust and water and a 3 meter drop. And now, internal memory and unattended monitoring.

The Fluke 64 MAX IR thermometer has the precision you need to do your job accurately and will not break your budget. Designed and tested to survive a 3 meter drop, you can count on this lightweight, compact infrared thermometer to work when you need it to work in the harshest environment and even when you're not able to be there.

Product Highlights

- Precise laser technology for more accurate and repeatable measurements
- Flashlight and large, easy-to-read backlit LCD display for easy viewing even in dark environment
- IP54 rated for extra protection against airborne contaminants
- Displays the minimum, maximum or average temperature, or the difference between two measurements
- 30 hour battery life so your tool can perform as long as you need it to
- And more!

Learn more about this product on page 103 >>

Alignment and Vibration Tools

Fluke 830 Laser Shaft Alignment Tool

The ideal test tool to precision-align rotating shafts in your facility

The Fluke 830 Laser Shaft Alignment tool is easy-to-use, giving you fast, accurate and actionable answers that will keep your plant up and running. When it comes to laser shaft alignment, data is good but answers are better.

Unlike using the straightedge method or dial indicators, the Fluke 830 performs the complicated alignment calculations for you, meaning you'll have the answers you need to quickly align your machine and get your plant up and running fast. An enhanced user interface provides easy to understand results that don't require extensive alignment knowledge, and the unique "All-in-One" result screen shows you both coupling results and feet corrections (vertical and horizontal) in real terms making it easy to take corrective action.

- Single laser measurement technology means reduced errors from backlash resulting in better data accuracy
- Intuitive guided user interface quickly and easily complete machine alignments
- Compass measurement mode enables flexible, reliable and repeatable measurements using an active electronic inclinometer
- Dynamic machine tolerance check provides continuous evaluation of alignment adjustments so you know when your machine is in the acceptable range
- Unique extend mode handles gross misalignment by virtually increasing laser detector size
- Data protection ensures your data is there when you need it with auto save and resume capability

Specifications

Computer	
CPU	Intel XScale PXA270 running at 312 MHz
Memory	64 MB RAM, 64 MB flash
Display	TFT, transmissive (sunlight-readable), 65,535 colors, backlit LED Resolution: 320 x 240 pixel; Dimensions: 89 mm (3.5 in) diagonal
LED indicators	Multicolor LED for laser status, alignment condition and battery status
Power supply	Integrated lithium-ion polymer rechargeable battery: 7.4 V/2.6 Ah
External interface	USB host and USB device (slave), integrated wireless communication, Class 1, transmitting power 100 mW, RS-232 (serial) for sensor, AC adapter/charger socket
Environmental protection	IP65 (dustproof, water spray resistant), shockproof, relative humidity 10% to 90%
Sensor	
Measurement principle	Coaxial, reflected laser beam
Laser	Type: Ga-Al-As semiconductor laser Wavelength (typical) 675 nm (red, visible) Safety class: Class 2, FDA 21 CFR 1000 and 1040 Beam power: < 1 mW
Detector	Measurement area: unlimited, dynamically extendible (U.S. Patent 6,040,903) Resolution: 1 µm; Accuracy (avg): > 98%
Inclinometer	Measurement range: 0° to 360°; Resolution: <1°
Environmental protection	IP67 (submersible, dustproof)
Prism	
Type	90° roof prism; Accuracy (avg): > 99%
Environmental protection	IP67 (submersible, dustproof)

Rotate the shaft and receive instant measurement verification.

Ordering information

Models	Included accessories
FLUKE-830 Laser Shaft Alignment Tool	Laser sensor, laser prism, chain-type mounting bracket with 150 mm support posts 2x, 300 mm support post 4x, micro fiber cleaning cloth, sensor cable, PC cable, USB drive, USB drive cable, tape measure, wireless Bluetooth® module, power adapter, instruction kit, and carrying case

Fluke 820-2 LED Stroboscope

Ideal for stop motion diagnostics and frontline mechanical troubleshooting

The Fluke 820-2 LED Stroboscope lets you confidently investigate and observe potential mechanism failure on a variety of machinery, in a wide range of industries, without making physical contact with the machine, or shutting the machine down. The Fluke 820-2 is rugged, compact and easy-to-use making it the ideal portable strobe for stop motion diagnostics, mechanical troubleshooting and process or product research. Use stop motion diagnostics to identify the running speed of rotating equipment, identify part numbers or other markings, measure the speed of rotation or frequency of a rotating shaft, speaker, or mechanical part, troubleshoot belt drive machines and much more!

- High intensity 7-LED array—4,800 Lux @ 6,000 FPM/30 cm
- High efficiency LED solid-state light source with uniform flash characteristics allow for higher flash rates—30 FPM to 300,000 FPM (flashes per minute)
- Digital pulse width modulation for exceptionally sharp images at high speeds
- Rugged, durable design utilizes solid-state LEDs with no filaments, gases, hollow cavities, or glass—(one meter drop)
- Quartz-accuracy control system provides high accuracy—0.02 % (± 1 digit)
- Multi-line LCD display
- Check the rotating speed of machinery without physical contact or need for reflective tape
- Advance or retard flash timing for viewing gear teeth, cutting surfaces, repeats, or "drifting" equipment
- Simple push button operation with 2x and ÷2 buttons for easy adjustment

Specifications

Flash frequency	
Range	30 to 300,000 FPM 0.5 to 5000 Hz
Accuracy	0.02 %
Resolution	30 to 999 FPM = 0.1 1000 to 300,000 = 1 0.5 Hz to 999 Hz = 0.1 1000 Hz to 5000 Hz = 1
Frequency setting	FPM or Hz
External trigger	
Method	Connector to externally control trigger
High level	3 V to 32 V
Low level	< 1 V
Minimum pulse width	50 µs connection
Safety compliance	
Agency approvals	CE Class III (SELV) Pollution Degree 2
Impact resistance	1 m drop
Mechanical specifications	
Size (HxWxL)	5.71 cm x 6.09 cm x 19.05 cm (2.25 in x 2.4 in x 7.5 in)
Weight	0.24 kg (0.53 lb)

Identify running speeds using stop motion diagnostics.

Ordering information

Models	Included accessories
FLUKE-820 LED Stroboscope	Protective case and external trigger connector

Fluke 810 Vibration Tester

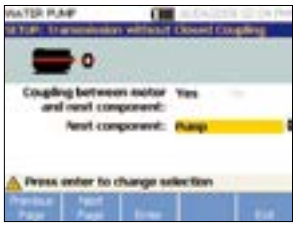
Get mechanical maintenance answers now!

The Fluke 810 Vibration Tester is the most advanced diagnostic tool for mechanical maintenance teams who need to keep machines up and running. The Fluke 810 is engineered to provide machine condition answers and evaluate the most common mechanical problems.

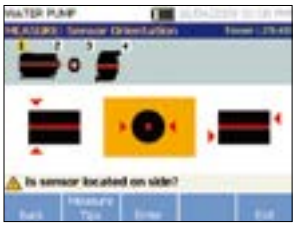
The Fluke 810 Vibration Tester uses a simple 3-step process to report on machine faults the first time measurements are taken, without prior machine history. To locate and diagnose common mechanical problems and prioritize repair actions, use these three simple steps: set-up with basic machine information; measure to quickly troubleshoot problems or monitor machine condition; and diagnose and identify the root cause, location and severity.

Use the Fluke 810 to:

- Easily determine the root cause, location and severity of common mechanical faults
- Efficiently prioritize and plan equipment repair or replacement
- Effectively deploy maintenance resources at the point of greatest impact



1. Setup



2. Measure

3. Diagnose

Viewer PC Software

- Store and track your data
- Generate diagnostic reports and track the severity of your machine's condition
- Import and store JPEG images

Specifications

Diagnostic specifications	
Analysis for	Motors, fans, blowers, belts and chain drives, gearboxes, couplings, centrifugal pumps, piston pumps, sliding vane pumps, propeller pumps, screw pumps, rotary thread/gear/lobe pumps, piston compressors, centrifugal compressors, screw compressors, closed coupled machines, spindles
Standard faults	Unbalance, looseness, misalignment and bearing failures
Motor rotational speed range	200 rpm to 12000 rpm
Diagnosis details	Plain-text diagnosis, fault severity (slight, moderate, serious, extreme), repair details, cited peaks, spectra
Tester specifications	
IP rating	IP54
A/D converter	4 channel, 24 bit
Dynamic range	128 dB
FFT resolution	800 lines
Battery	Lithium-ion, rechargeable, 8 hours operating life
Onboard storage capacity	2 GB internal + user accessible slot for additional storage
Warranty	Three-year (tester), One-year (sensor and tachometer)
Sensor specifications	
Sensor type	Tri-axial accelerometer , 100 mV/g (± 5 %, 25 °C)
Tachometer specifications	
Tachometer type	Laser Diode Class 2

Ordering information

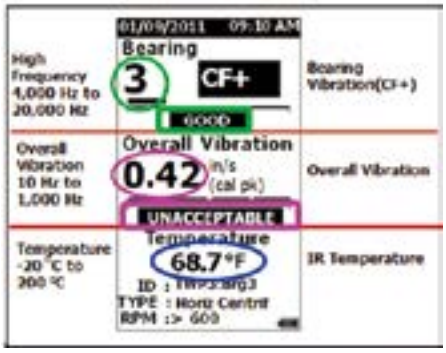
Models	Included accessories
FLUKE-810 Vibration Tester	Tri-axial accelerometer, magnet mount, mounting pad kit with adhesive, quick-disconnect accelerometer cable, laser tachometer with storage pouch, battery pack with cable and adapters, shoulder strap, adjustable hand strap, Viewer PC software, mini USB to USB cable, carrying case, training DVD, getting started guide, quick reference guide, and users manual on DVD

Fluke 805 FC Vibration Meter

Forget the pens. Think METER.

The Fluke 805 FC Vibration Meter is the most reliable vibration screening device available for frontline mechanical troubleshooting teams who need repeatable, severity-scaled readings of overall vibration and bearing condition.

- 5 tools in 1: Overall vibration, bearing impacting, temperature, machine health severity, and bearing health severity
- Get authorization to take next steps in an instant if machine health is at risk via Fluke Connect*
- Four-level severity scale assesses urgency of vibration problems
- Vibration measurement for acceleration, velocity, and displacement units of measurement
- Colored lighting system (green, red) and on-screen comments indicate how much pressure needs to be applied to take measurements
- Non-contact temperature measurement increases machine health screening capabilities
- External accelerometer support for hard to reach locations



What is Crest Factor+?

Crest Factor (CF) is used to identify bearing faults and is the ratio of the peak value/RMS value of a time domain vibration signal. As the bearing condition worsens, the CF+ value increases.

Fluke has also included a four-level severity scale that identifies the bearing health.

More than an overall vibration meter—5 tools in 1

1. Low frequency vibration meter
2. High frequency vibration meter (bearings)
3. IR temperature meter
4. Machine health screening tool (37 machine categories)
5. Bearing health screening tool

Specifications

Vibration meter	
Low frequency range (overall measurement)	10 Hz to 1,000 Hz
High frequency range (CF+ measurement)	4,000 Hz to 20,000 Hz
Severity levels	Good, Satisfactory, Unsatisfactory, Unacceptable
Vibration limit	50 g peak (100 g peak-peak)
A/D converter	16-bit
Sampling rate	Low frequency: 20,000 Hz; high frequency: 80,000 Hz
Sensor	
Sensitivity	100 mV/g ± 10 %
Measurement range	0.01 g to 50 g
Low frequency range (overall measurement)	10 Hz to 1,000 Hz
High frequency range (CF+ measurement)	4,000 Hz to 20,000 Hz
Resolution	0.01 g
Accuracy	At 100 Hz ± 5 % of measured value
Amplitude units	
Acceleration	g, m/sec2
Velocity	in/sec, mm/sec
Displacement	mils, mm
Infrared thermometer (temperature measurement)	
Range	-20 °C to 200 °C (-4 °F to 392 °F)
Accuracy	± 2 °C (4 °F)
Focal length	Fixed, at ~3.8 cm (1.5 in)
Environmental	
IP rating	IP54
Drop test	1 meter

Ordering information

Models	Includes
FLUKE-805 Vibration Meter	USB cable, storage case, belt holster, quick reference guide, (includes MS Excel template and documentation), and two AA batteries
FLUKE-805 FC Vibration Meter	USB cable, storage case, belt holster, quick reference guide, (includes MS Excel template and documentation), and two AA batteries
FLUKE-805ES External Sensor	External vibration sensor with threaded mounting bolt, removable "U" shaped magnet mount, and 2.1336 m (7 ft) coiled cable

*** Fluke Connect (FC) is not available in all countries. Non-FC models are available. Check with your local authorized Fluke distributor for more info**

FLUKE®

Battery Analyzers

Fluke 500 Series Battery Analyzers

Reduced testing complexity, a simplified workflow and an intuitive user interface provide a new level of ease-of-use in battery testing

The new Fluke BT500 Series Battery Analyzer is ideal test tool for maintenance, troubleshooting and performance testing of individual stationary batteries and battery banks used in critical battery back-up applications. Fluke BT500 Series Battery Analyzers cover a broad range of battery test functions ranging from dc voltage and resistance tests to full condition testing using an automated string function testing and the test probe integrated infrared temperature measurement system. BT500 Series Battery Analyzers are designed for measurements on stationary batteries of all types.

- **Key measurements:** Battery resistance, dc and ac voltage, dc and ac current, ripple voltage, frequency and battery temperature
- **Sequence measurement mode:** Automatic or manual sequence testing of battery strings with automatic measurement storage including voltage, resistance and temperature (with BTL21 intelligent test probe)
- **Comprehensive logging:** All measured values are automatically captured during testing and can be reviewed on the instrument before downloading for on the-go analysis
- **Optimized user interface:** Quick, guided setup ensures the right data is captured every time, and the combined visual and audio feedback cues reduce the risk of measurement confusion
- Safety CAT III 600 V

Specifications

Functions	Range	Resolution	Accuracy	BT510	BT520	BT521
Battery resistance[1]	3 mΩ	0.001 mΩ	1 % + 8	•	•	•
	30 mΩ	0.01 mΩ	0.8 % + 6	•	•	•
	300 mΩ	0.1 mΩ	0.8 % + 6	•	•	•
	3000 mΩ	1 mΩ	0.8 % + 6	•	•	•
V dc	6 V	0.001 V	0.09 % + 5	•	•	•
	60 V	0.01 V	0.09 % + 5	•	•	•
	600 V	0.1 V	0.09 % + 5	•	•	•
	1000 V	1 V	0.09 % + 5			•
V ac (45 Hz to 500 Hz with 800 Hz filter)	600 V	0.1 V	2 % + 10	•	•	•
Frequency (displayed with V ac and A ac)[2]	500 Hz	0.1 Hz	0.5 % + 8	•	•	•
AC voltage ripple (20 KHz Max)	600 mV	0.1 mV	3 % + 20	•	•	•
	6000 mV	1 mV	3 % + 10	•	•	•
A dc/A ac (with accessory Fluke i410)	400 A	1 A	3.5 % + 2			•
Temperature	0 °C to 60 °C	1 °C	2 °C (4 °F)			•
Meter mode	999 records for each measurement position with time stamp					
Sequence mode	Up to 100 profiles and 100 profile templates (Each profile stores up to 450 batteries) with time stamp					

[1]The measurement is based on AC injection method. The injected source signal is < 100 mA, 1 kHz.
[2]Trigger level V ac: 10 mV, A ac: 10 A.

Measure impedance with the Fluke BT521 Battery Analyzer.

Ordering information

Models	Included accessories
FLUKE-BT521 Advanced Battery Analyzer	4-wire test pin (set), test lead (set), test leads with adapter, test probe set with extender and temperature sensor, ac/dc current clamp, lithium-ion battery, ac charger, mini-USB cable, shoulder strap, belt strap, magnetic hanging strap, software, soft carrying case, spare fuses (2), battery tags, and zero ohm calibration resistor
FLUKE-BT520 Battery Analyzer	4-wire test pin (set), test lead (set), test leads with adapter, test probe set with extender (no temperature sensor), lithium-ion battery, ac charger, mini-USB cable, shoulder strap, belt strap, magnetic hanging strap, software, soft carrying case, spare fuses (2), battery tags, and zero ohm calibration resistor
FLUKE-BT510 Battery Analyzer	4-wire test pin (set), est lead (set), test leads with adapter, lithium-ion battery, ac charger, mini-USB cable, shoulder strap, belt strap, magnetic hanging strap, software, soft carrying case, spare fuses (2), and zero ohm calibration resistor

Bench Multimeters

Fluke 8846A, 8845A and 8808A Precision Bench Multimeters

Performs functions expected in multifunction digital multimeters

The Fluke 8846A/8845A 6.5 Digit Precision Multimeters measure volts, ohms and amps. Basic V dc accuracy of up to 0.0024 %, 10 A current range, and a wide ohms range give you an unbeatable combination of measurement capability.

Extend the meters' utility even more with their graphical display modes, including Trendplot™ paperless recorder mode, statistics and histograms—features you won't find on other multimeters

- 6.5 digit resolution
- Up to 0.0024 % accuracy
- Graphical analysis modes: TrendPlot, Histogram, and Statistics
- Dual measurement inputs: front/rear
- Wide measurement ranges
- IEEE, LAN, RS-232 interfaces
- USB memory device port (8846A)
- TL2X4 wire measurement technique
- Three-year warranty

Fluke 8808A 5.5 Digit Multimeter

The Fluke 8808A multimeter has a broad range of functions, measuring volts, ohms and amps with a basic V dc accuracy of 0.015 %. The meter is easy to use and include innovative functions to simplify routine testing and precision 4 wire resistance measurements.

- 5.5 digit resolution
- Up to 0.015 % accuracy
- Sensitive dc leakage current ranges
- Front panel setup keys
- TL2X4 wire measurement technique
- Three-year warranty

Built-in TrendPlot graphically plots extent of drift and intermittent events.

Histogram mode can reveal stability or noise problems.

Make true 4-wire measurements with just two leads.

Specifications

	Fluke 8808A	Fluke 8845A	8846A
Display	dual	dual, graphical	
Resolution (No. of digits)	5.5	6.5	
Measurements	V ac, V dc, I dc, I ac, Ω, Cont, Diode	V ac, V dc, I dc, I ac, Ω, Cont, Diode	
Basic V dc accuracy (% Reading + % Range)	0.015 + 0.003	0.0035 + 0.0005	0.0024 + 0.0005
Advanced measurements/ functions	2x4 wire ohms, freq, i-Leakage dedicated setup keys	2x4 wire ohms, freq, period	2x4 wire ohms, freq, period, capacitance, temp (RTD)
Math	Null, dBm, dB, Min, Max	Null, dBm, dB, Min, Max, Ave, Std Deviation, MX+B	
Analysis	Limit Compare	Limit Compare, TrendPlot, Histogram, Statistics	
USB memory device port			•
Interfaces	RS-232, USB via optional adapter	RS-232, IEEE-488.2, LAN, USB via optional adapter	
Safety rating	CAT II 600 V	CAT II 600 V	

Ordering information

Models	Included accessories
FLUKE-8846A 6.5 Digit Precision Multimeter, 24 ppm USB memory	Power cord, test lead set, programmers manual/users manual on CD, FVF-BASIC, FlukeView Forms Software Basic Version
FLUKE-8845A 6.5 Digit Precision Multimeter, 35 ppm	Power cord, test lead set, programmers manual/users manual on CD, FVF-BASIC, FlukeView Forms Software Basic Version
FLUKE-8808A 5.5 Digit Multimeter	Test leads, line cord, getting started guide, users manual on CD

Clamp Meters

Selection guide

	Residential/commercial electrical			General purpose		
	323	324	325	365	373	374 FC
Measurements						
AC current	•	•	•	•	•	•
AC voltage	•	•	•	•	•	•
Resistance	•	•	•	•	•	•
Continuity	•	•	•	•	•	•
DC volts	•	•	•	•	•	•
DC current			•	•		•
True-rms	•	•	•	•	•	•
Frequency			•			
AC + DC voltage						
AC + DC current						
Min/Max/Avg			•			•
4–20 mA (0.01 mA resolution)						
Temperature		•	•			
Capacitance		•	•		•	•
Measurement logging						
Special features						
Inrush current mode						•
Low Pass filter for VFD's						
Harmonics, power, data logging						
18-inch (45.7 cm) iFlex Flexible Current Probe						Optional
10-inch (25.4 cm) iFlex Flexible Current Probe						Optional
Remote display						in phone app
Wireless						•
Display						
Display hold	•	•	•	•	•	•
Backlight		•	•	•	•	•
Graphing display						in phone app
Specifications						
Jaw opening	30 mm (1.18 in)	30 mm (1.18 in)	30 mm (1.18 in)	18 mm (0.7 in)	32 mm (1.26 in)	34 mm (1.33 in)
Max wire size	300 mm^2	300 mm^2	300 mm^2	17 mm (0.67 in)	400 mm^2	400 mm^2
Current range ac rms	0 to 400.0 A	0 to 40.00 A/ 400.0 A	0 to 40.00 A/ 400.0 A	0 to 200.0 A	0 to 600.0 A	0 to 600.0 A (2500 A with iFlex)
Accuracy ac current (50/60 Hz)	2 % ± 5 counts	2 % ± 5 counts	2 % ± 5 counts	2 % ± 5 counts	2 % ± 5 counts	2 % ± 5 counts
AC Response	True-rms	True-rms	True-rms	True-rms	True-rms	True-rms
Current range dc			0 to 40.00 A/ 400.0 A	0 to 200 A		0 to 600.0 A
Accuracy dc current			2 % ± 5 counts	2 % ± 5 counts		2 % ± 5 counts
Voltage range ac	0 to 600.0 V	0 to 600.0 V	0 to 600.0 V	0 to 600.0 V	0 to 600.0 V	0 to 1000 V
Accuracy ac voltage	1.5 % ± 5 counts	1.5 % ± 5 counts	1.5 % ± 5 counts	2 % ± 5 counts	1 % ± 5 counts	1.5 % ± 5 counts
Voltage range dc	0 to 600.0 V	0 to 600.0 V	0 to 600.0 V	0 to 600.0 V	0 to 600.0 V	0 to 1000 V
Accuracy dc voltage	1.0 % ± 5 counts	1.0 % ± 5 counts	1.0 % ± 5 counts	2 % ± 5 counts	1 % ± 5 counts	1 % ± 5 counts
Resistance range	0 to 4000 Ω	0 to 4000 Ω	0 to 40 kΩ	0 to 6000 Ω	0 to 6000 Ω	0 to 6000 Ω
Frequency measurement range			5 Hz to 500 Hz			
Unit power						
Auto off	•	•	•		•	•
Warranty and safety						
Warranty (years)	2	2	2	3	3	3
Safety rating (EN 61010)	CAT IV 300 V, CAT III 600 V	CAT IV 300 V, CAT III 600 V	CAT IV 300 V, CAT III 600 V	CAT III 600 V	CAT III 600 V, CAT IV 300 V	CAT III 1000 V, CAT IV 600 V
Fluke Connect						
Compatible with Fluke Connect® app						•
Compatible with Fluke Connect® Assets software						•

Clamp Meters

	General purpose	Industrial electrical		HVAC/R	High-end industrial, utility		Leakage	Wireless	
	375 FC	376 FC	381	902 FC	353	355	368 FC/369 FC	a3000 FC	a3001 FC
Measurements									
AC current	•	•	•	•	•	•	•	•	•
AC voltage	•	•	•	•		•			
Resistance	•	•	•	•		•			
Continuity	•	•	•	•		•			
DC volts	•	•	•	•		•			
DC current	•	•	•	•	•	•			
True-rms	•	•	•	•	•	•	•	•	•
Frequency	•	•	•		•	•			•
AC + DC voltage						•			
AC + DC current					•	•			
Min/Max/Avg	•	•	•	•	•	•			
4-20 mA (0.01 mA resolution)									
Temperature				•					
Capacitance	•	•		•					
Measurement logging	•	•					•	•	•
Special features									
Inrush current mode	•	•	•		•	•		•	•
Low Pass filter for VFD's	•	•	•		•	•			
Harmonics, power, data logging									
18-inch (45.7 cm) iFlex Flexible Current Probe	Optional	Included	Included						Optional
10-inch (25.4 cm) iFlex Flexible Current Probe	Optional	Optional	Optional						Included
Remote display	in phone app	in phone app	•	in phone app			in phone app	in phone app	in phone app
Wireless	•	•					•	•	•
Display									
Display hold	•	•	•	•	•	•	•	in phone app	in phone app
Backlight	•	•	•	•	•	•	•	•	
Graphing display	in phone app	in phone app		in phone app			in phone app	in phone app	in phone app
Specifications									
Jaw opening	34 mm (1.33 in)	34 mm (1.33 in)	34 mm (1.33 in)	30 mm (1.2 in)	58 mm (2.3 in)	58 mm (2.3 in)	40 mm (1.5 in)/ 61 mm (2.4 in)	34 mm (1.33 in)	254 mm (10 in) coil
Max wire size	400 mm²	400 mm²	400 mm²	300 mm²	400mm² or 3x 240 mm²	400mm² or 3x 240 mm²		400 mm²	
Current range ac rms	0 to 600.0 A (2500 A with iFlex)	0 to 999.9 A (2500 A with iFlex)	0 to 999.9 A (2500 A with iFlex)	0 to 600.0 A	0 to 1400 A	0 to 1400 A	0 to 60 A	0 to 400A	0 to 2500A
Accuracy ac current (50/60 Hz)	2 % ± 5 counts	2 % ± 5 counts	2 % ± 5 counts	2 % ± 5 counts	1.5 % ± 5 counts	1.5 % ± 5 counts	1 % ± 5 counts	2 % ± 5 counts	3 % ± 5 counts
AC Response	True-rms	True-rms	True-rms	True-rms	True-rms	True-rms	True-rms	True-rms	True-rms
Current range dc	0 to 600.0 A	0 to 999.9 A	0 to 999.9 A	0 to 200 µA	0 to 2000 A	0 to 2000 A			
Accuracy dc current	2 % ± 5 counts	2 % ± 5 counts	2 % ± 5 counts	1 % ± 5 counts	1.5 % ± 5 counts	1.5 % ± 5 counts			
Voltage range ac	0 to 1000 V	0 to 1000 V	0 to 1000 V	600.0 V		0 to 600.0 V			
Accuracy ac voltage	1.5 % ± 5 counts	1.5 % ± 5 counts	1.5 % ± 5 counts	1 % ± 5 counts		1 % ± 5 counts			
Voltage range dc	0 to 1000 V	0 to 1000 V	0 to 1000 V	0 to 600.0 V		0 to 1000 V			
Accuracy dc voltage	1 % ± 5 counts	1 % ± 5 counts	1 % ± 5 counts	1 % ± 5 counts		1 % ± 5 counts			
Resistance range	0 to 6000 Ω	0 to 60 kΩ	0 to 60 kΩ	0 to 9999 Ω		0 to 400 kΩ			
Frequency measurement range	500 Hz	500 Hz	500 Hz		5 to 1000 Hz	5 to 1000 Hz	40 to 1000 Hz		
Unit power									
Auto off	•	•	•	•	•	•	•	•	•
Warranty and safety									
Warranty (years)	3	3	3	3	3	3	1	3	3
Safety rating (EN 61010)	CAT III 1000 V, CAT IV 600 V	CAT III 1000 V, CAT IV 600 V	CAT III 1000 V, CAT IV 600 V	CAT III 600 V	CAT III 1000 V, CAT IV 600 V	CAT III 1000 V, CAT IV 600 V	CAT III 600 V	CAT III 600 V	CAT III 1000 V CAT IV 600 V
Fluke Connect									
Compatible with Fluke Connect® app	•	•		•			•	•	•
Compatible with Fluke Connect® Assets software	•	•		•			•	•	•

Fluke 370 FC Series True-rms Clamp Meters

Unprecedented measurement flexibility

The Fluke 370 FC Series clamp meters offer advanced troubleshooting performance plus Fluke Connect features to log and transmit data wirelessly.

Now you are able to log and trend measurements (the 376 FC and 375 FC have internal memory for up to 65,000 measurements), capture measurements outside the arcflash zone with Bluetooth® connectivity to your Apple® or Android® devices, transmit results wirelessly via the Fluke Connect Measurements app, and create and send reports right from the field.

The Fluke 370 FC Series Clamp Meters have a large backlit display, true-rms standard, CAT IV safety rating and a durably constructed body. Additionally, the 376 FC, 375 FC and 374 FC are compatible with the iFlex® Flexible Current Probe that measure up to 2500a ac.

Ordering information

Models	Included accessories
FLUKE-373 True-rms Wireless AC Clamp Meter	Test leads, soft carrying case, instruction card, safety information sheet, two AA alkaline batteries.
FLUKE-374 FC True-rms Wireless AC/DC Clamp Meter	Test leads, soft carrying case, instruction card, safety information sheet, two AA alkaline batteries.
FLUKE-375 FC True-rms Wireless AC/DC Clamp Meter	Test leads, soft carrying case, instruction card, safety information sheet, two AA alkaline batteries.
FLUKE-376 FC True-rms Wireless AC/DC Clamp Meter with iFlex	18-inch (45.7 cm) iFlex flexible current probe, test leads, TPAK magnetic hanging strap, soft carrying case, instruction card, safety information sheet, two AA alkaline batteries.

***Fluke Connect (FC) system is not available in all countries. Non-FC models are available. Check with your local authorized Fluke distributers for more info.**

Fluke 320 Series True-rms Clamp Meters

Go to work with the best

The small and rugged 320 Series True-rms Clamp Meters are the best general troubleshooting tools for commercial and residential electricians and are designed to verify the presence of load current, ac voltage and continuity of circuits, switches, fuses and contacts. The Fluke 325 also offers dc current and frequency measurements.

- 400 A ac current measurement (ac and dc current; 325 only) and 600 V ac and dc voltage measurement
- Resistance measurement to up to 40 kΩ (325) and 4 kΩ (323 and 324) with continuity
- CAT IV 300 V/CAT III 600 V safety rating

Ordering information

Models	Included accessories
FLUKE-325 True-rms Clamp Meter	Test leads, temperature probe, soft case and users manual
FLUKE-324 True-rms Clamp Meter	Test leads, temperature probe, soft case and users manual
FLUKE-323 True-rms Clamp Meter	Test leads, soft case and users manual

Recommended accessories

Fluke 370 Series

i2500-10
10 inch (25.4 cm)
iFlex® Flexible Current Probe

Fluke 370 Series

C43 Small Soft Case

Fluke 320 Series

TL175 TwistGuard™
Test Leads

Fluke 320 Series

L210 Probe Light and Extender

Fluke 381 Remote Display True-rms AC/DC Clamp Meter with iFlex®

The world's most advanced clamp meter

The Fluke 381 Clamp Meter combines iFlex® flexibility with remote reading capability for the ultimate in innovation and safety. The remote display reads measurements up to 9 m (30 feet) away and the included iFlex Flexible current probe (18-inch/45.7 cm circumference) lets you easily get into tight spaces.

- 2500 A ac current measurement with iFlex
- 1000 A ac and dc current measurement with fixed jaw
- 1000 V ac and dc voltage measurement
- Frequency measurement to 500 Hz
- 60 kΩ resistance measurement
- Min/Max/Avg and inrush recording
- CAT IV 600 V, CAT III 1000 V
- Three-year warranty

Ordering information

Models	Included accessories
FLUKE-381 Remote Display True-rms AC/DC Clamp Meter with iFlex	18-inch (45.7 cm) iFlex Flexible Current Probe, test leads, soft carrying case, instruction card, safety information sheet, five AA alkaline batteries

Fluke 365 Detachable Jaw True-rms AC/DC Clamp Meter

Where rugged meets reliable

The Fluke 365 Clamp Meter offers a small, detachable jaw—with 1.2 m of coil—that makes it easy to take and read measurements in tight or hard-to-reach places.

- 200 A ac and dc current measurement
- 600 V ac and dc voltage measurement
- 6000 Ω resistance measurement
- Built-in flashlight
- Large, easy-to-read backlight display
- Three-year warranty

Ordering information

Models	Included accessories
FLUKE-365 Detachable Jaw True-rms AC/DC Clamp Meter	Test leads, soft carrying case, instruction card, safety information sheet, five AA alkaline batteries

Recommended accessories

Fluke 381 AC285 SureGrip™ Alligator Clips	Fluke 381 TLK289 Industrial Master Test Lead Set	Fluke 365 TL220 SureGrip™ Industrial Test Lead Set	Fluke 365 FTPL-1 SureGrip™ Fused Test Probe and Lead Set

Fluke 902 FC True-rms Wireless HVAC Clamp Meter

Helps HVAC pros keep up with the demands of their job

HVAC technicians require a service tool they can depend on to consistently meet the expectations of their job. The Fluke 902 FC expands the existing line of quality Fluke clamp meters by delivering the features necessary to diagnose and repair HVAC systems. Combined with Fluke Connect®, the Fluke 902 FC helps technicians do their jobs safely and accurately.

- Capture and trend measurements safely from outside the arc blast zone and easily create and send reports from the field with Fluke Connect®
- Designed for HVAC applications with capacitance, dc current (µA) and temperature measurements
- Small body and jaws fit perfectly in your hand and into tight places
- True-rms voltage and current for accurate measurements of non-linear signals
- Three-year warranty

Ordering information

Models	Included accessories
FLUKE-902 FC True-rms Wireless HVAC Clamp Meter	Test leads, temperature probe, soft carrying case, users manual, two AA alkaline batteries

Fluke 368 FC/369 FC AC True-rms Leakage Current Clamp Meter

Reduce downtime – Test leakage currents without taking equipment offline

The Fluke 368/369 Series of true-rms leakage current clamp meters help users detect, document, record and compare leakage current readings over time as a means of preventing unplanned downtime, and identifying intermittent GFCI and RCD trips, all without taking equipment off line.

Current measurement

- Automatic ranging within the manually selected mA or A range
- Ranges 3/30 mA and 30/60 A
- Current resolution 1 µA/0.01 mA and 0.01 A/0.1 A
- Selectable filter 40 Hz to 70 Hz or wideband 40 Hz to 1 kHz
- Frequency range 40 Hz to 1 kHz
- Jaw size: 40 mm (1.55 in) on 368 FC and 61 mm (2.4 in) on 369 FC diameter
- Auto power off; Torch light; Logging
- Fluke Connect compatible

Ordering information

Models	Included accessories
FLUKE-368 FC AC Leakage Current Clamp Meter	Soft carrying case, users manual
FLUKE-369 FC AC Leakage Current Clamp Meter	Soft carrying case, users manual

Recommended accessories

Fluke 902	Fluke 902	Fluke 902	Fluke 902
AC220 SureGrip™ Alligator Clips	AC175 Alligator Clip Set	TL224 SureGrip™ Insulated Test Leads	C33 Soft Carrying Case

***Fluke Connect (FC) system is not available in all countries. Non-FC models are available. Check with your local authorized Fluke distributers for more info.**

Wireless Fluke Connect® Current Meters

FLUKE CONNECT™

Take three-phase measurements in one-third of the time

Testing 3-phase is now faster and cheaper. When your cabinet is de-energized, attach the 3000 FC Wireless Current Clamp to each phase. You can solve problems faster by seeing live measurements from multiple test points on a single screen. Then, send data to your laptop and go from logging to analysis and diagnosis using the Fluke Connect® app or Fluke Connect® Assets software.

Fluke a3000 FC Wireless AC Current Clamp Meter

A fully functional true-rms current clamp meter that wirelessly relays measurements to other Fluke Connect® enabled master units.

- Measure up to 400 A ac

Fluke a3001 FC Wireless iFlex AC Current Meter

A true-rms flexible current meter that wirelessly relays measurements to other Fluke Connect enabled master units.

- Record over time to monitor circuit load changes for an hour, a shift or a week
- Measure up to 2500 A ac

Fluke a3002 FC Wireless AC/DC Current Meter Module

- Measure up to 400 A ac or 400 A dc with i410 (sold separately)
- Measure up to 600 A ac or 1000 A dc with i1010 (sold separately)
- Use as a standalone meter or as part of the system

Fluke a3003 FC Wireless 2000 A DC Current Clamp Meter

- Measure up to 2000 A DC
- Large jaw size (64 mm) for measuring large, high current conductors
- Use the logging function for the recording and saving up to 65,000 readings

Fluke a3004 FC Wireless 4-20 mA DC Current Meter

- Measure 4 to 20 mA signals without “breaking the loop”
- Detachable clamp with extension cable for measurements in tight locations
- Use the logging function for the recording and saving up to 65,000 readings

Fluke a3003 FC Wireless 2000 A DC Current Clamp Meter

Fluke a3004 FC Wireless 4-20 mA DC Current Meter

Ordering information

Models	Included accessories
FLUKE-a3000 FC Wireless AC Current Clamp Meter	Information pack
FLUKE-a3001 FC Wireless iFlex AC Current Meter	iFlex current probe, information pack, magnetic hanger
FLUKE-a3002 FC Wireless AC/DC Current Meter Module	Information pack, magnetic hanger
FLUKE-a3003 FC Wireless 2000 A DC Current Clamp Meter	2000 A DC Clamp, information pack, magnetic hanger
FLUKE-a3004 FC Wireless 4-20 mA DC Current Meter	4-20 mA DC current probe, information pack, hanging strap

***Fluke Connect (FC) system is not available in all countries. Non-FC models are available. Check with your local authorized Fluke distributers for more info.**

Fluke 353 and 355 AC/DC True-rms Clamp Meters

Versatile, professional, accurate

Confidently take reliable readings with the true-rms Fluke 355 and 353 Clamp Meters—the tools of choice for high current clamp-on amp meter measurements up to 2000 A.

- Reliably handle a wide range of high-current applications with 2000 A ac + dc true-rms, 1400 A ac, and 2000 A dc
- High voltage measurement of 1000 V ac + dc true-rms, 600 V ac, and 1000 V dc (355 only)
- Resistance to 400 kΩ (355 only)
- Continuity beeper (355 only)
- Frequency measurement to 1 kHz
- Selectable low-pass filter mode
- Min/Max/Avg

Ordering information

Models	Included accessories
FLUKE-355 AC/DC True-rms Clamp Meter	Soft carrying case, users manual
FLUKE-353 AC/DC True-rms Clamp Meter	Soft carrying case, users manual

Recommended accessories

Fluke 350 Series	Fluke 350 Series	Fluke 350 Series	Fluke 350 Series
TL175 TwistGuard™ Test Leads	80TK Thermocouple Module	C345 Large Soft Case	C1600 Gear Tool Box

FLUKE ®
Digital Multimeters

Selection guide

	Advanced meters			Wireless meters		General purpose
Models	**87 V**	**289**	**287**	**233**	**3000 FC**	**179**
Basic features						
Counts	20000	50000	50000	6000	6000	6000
True-rms readings	ac	ac+dc	ac+dc	ac	ac	ac
Basic dc accuracy	0.05 %	0.025 %	0.025 %	0.25 %	0.09 %	0.09 %
Wide bandwidth	20 kHz	100 kHz	100 kHz			
Auto/manual ranging	•/•	•/•	•/•	•/•	•/•	•/•
ATEX II 2G Eex ia IICT4 safety rating Z1/Z2						
Measurements						
Voltage ac/dc	1000 V	1000 V	1000 V	1000 V	1000 V	1000 V
Current ac/dc	10 A	10 A	10 A	10 A	400 mA	10 A
Resistance	50 MΩ	500 MΩ	500 MΩ	40 MΩ	50 MΩ	50 MΩ
Frequency	200 kHz	1 MHz	1 MHz	50 kHz	100 kHz	100 kHz
Capacitance	10,000 µF	50,000 µF	50,000 µF	10,000 µF	10,000 µF	10,000 µF
Temperature	+1090 °C	+1350 °C	+1350 °C	+400 °C		+400 °C
dB		60 dB	60 dB			
Conductance	50 nS	50 nS	50 nS			
Duty cycle/pulse width	•/–	•/•	•/•			
Continuity/diode test	▪	▪	▪	▪	▪	▪
Motor Drive (ASD) Measurements	▪	▪				
VoltAlert™, non-contact voltage detection						
VCHEK™						
LoZ: low input impedance		▪				
Lo ohms		▪				
Microamps	▪	▪	▪			
Display						
Removable wireless display				▪		
Remote wireless readings, connects to smart phone		(with ir3000 FC connector, sold separately)	(with ir3000 FC connector, sold separately)		▪	
Dot matrix display		▪	▪		▪	
Dual display		▪	▪		▪	
Analog bargraph	▪	▪	▪			▪
Backlight	Two level	Two level	Two level	▪	▪	▪
Graphical trend display		▪	▪			
Diagnostics and data						
Min/Max recording with time stamp	•/–	•/•	•/•	•/–	•/–	•/–
Fast Min/Max	250 µs	250 µs	250 µs			
Display Hold/Auto (Touch) Hold	•/•	•/•	•/•	•/•	•/•	•/•
Relative reference	▪	▪	▪			
Stand alone logging		▪	▪		(with FC app)	
Trend Capture		▪	▪		(with FC app)	
Readings memories		10,000	10,000		(with FC app)	
USB interface		▪	▪			
Other features						
Real time clock		▪	▪			
Automatic selection, ac/dc volts						
Closed case calibration	▪	▪	▪	▪	▪	▪
Separate battery/fuse access	•/–	•/•	•/•	▪	▪	▪
Automatic power off	▪	▪	▪	▪	▪	▪
Low battery indication	▪	▪	▪	▪	▪	▪
Operating temperature range	-20 °C, +55 °C	-20 °C, +55 °C	-20 °C, +55 °C	-10 °C, +50 °C	-10 °C, +50 °C	-10 °C, +50 °C
Warranty and electrical safety						
Warranty (years)	Limited lifetime	Limited lifetime	Limited lifetime	3	3	Lifetime
Input alert	▪	▪	▪			
IP Rating	IP30				IP54	
Safety rating (EN 61010) CAT III	1000 V	1000 V	1000 V	1000 V	1000 V	1000 V
Safety rating (EN 61010) CAT IV	600 V	600 V	600 V	600 V	600 V	600 V

Digital Multimeters

	Compact meters					Specialty meters			
Models	**117**	**116**	**115**	**114**	**113**	**28 II**	**27 II**	**28IIEX**	**279 FC**
Basic features									
Counts	6000	6000	6000	6000	6000	20000	6000	20000	6000
True-rms readings	ac	ac	ac	ac	ac	ac		ac	ac
Basic dc accuracy	0.5 %	0.5 %	0.5 %	0.5 %	0.5 %	0.05 %	0.1 %	0.05 %	0.09 %
Wide bandwidth						20 kHz	30 kHz	20kHz	
Auto/manual ranging	·/·	·/·	·/·	·/·	·/·	·/·	·/·	·/·	·/·
ATEX II 2G Eex ia IICT4 safety rating Z1/Z2								·	
Measurements									
Voltage ac/dc	600 V	600 V	600 V	600 V	600 V	1000 V	1000 V	1000 V	1000 V
Current ac/dc	10 A	600 µA	10 A			10 A	10 A	10 A	2500 A AC (with iFlex)
Resistance	40 MΩ	40 MΩ	40 MΩ	40 MΩ	60 kΩ	50 MΩ	50 MΩ	50 MΩ	50 MΩ
Frequency	100 kHz	100 kHz	100 kHz			200 kHz	200 kHz	200 kHz	100 kHz
Capacitance	10,000 µF	10,000 µF	10,000 µF		10,000 µF	10,000 µF	10,000 µF	10,000 µF	10,000 µF
Temperature		+400 °C				+1090 °C		+1090 °C	Infrared camera -10 °C to +200 °C
dB									
Conductance						60 nS	60 nS	60 nS	
Duty cycle/pulse width						·/–	·/–	·/–	
Continuity/diode test	·	·	·	·	·	·	·	·	·
Motor Drive (ASD) Measurements						·		·	·
VoltAlert™, non-contact voltage detection	·								
VCHEK™					·				
LoZ: low input impedance	·	·		·	·				
Lo ohms									
Microamps		·				·	·	·	
Display									
Removable wireless display									
Remote wireless readings, connects to smart phone									·
Dot matrix display									
Dual display									
Analog bargraph	·	·	·	·	·	·	·	·	
Backlight	·	·	·	·	·	Two level	Two level	Two level	·
Graphical trend display									
Diagnostics and data									
Min/Max recording with time stamp	·/–	·/–	·/–	·/–	·/–	·/–	·/–	·/–	·/–
Fast Min/Max						250 µs		250 µs	
Display Hold/Auto (Touch) Hold	·/–	·/–	·/–	·/–	·/–	·/·	·/·	·/·	·/·
Relative reference						·	·	·	
Stand alone logging									(with FC app)
Trend Capture									(with FC app)
Readings memories									(with FC app)
USB interface									
Other features									
Real time clock									
Automatic selection, ac/dc volts	·	·		·	·				
Closed case calibration	·	·	·	·	·	·	·	·	·
Separate battery/fuse access	·	·	·	·	·	·/·	·	·/–	·
Automatic power off	·	·	·	·	·	·	·	·	·
Low battery indication	·	·	·	·	·	·	·	·	·
Operating temperature range	-10 °C, +50 °C	-10 °C, +50 °C	-10 °C, +50 °C	-10 °C, +50 °C	-10 °C, +50 °C	-40 °C, +55 °C	-40 °C, +55 °C	-15 °C, +50 °C	-15 °C, +50 °C
Warranty and electrical safety									
Warranty (years)	3	3	3	3	3	Limited lifetime	Limited lifetime	3	3
Input alert						·	·	·	
IP Rating	IP42	IP42	IP42	IP42	IP42	IP67	IP67	IP67	IP40
Safety rating (EN 61010) CAT III	600 V	600 V	600 V	600 V		1000 V	1000 V	1000 V	1000 V
Safety rating (EN 61010) CAT IV					600 V	600 V	600 V	600 V	600 V

NEW

Fluke 279 FC
Thermal Multimeter

Fluke 279 FC True-rms Thermal Multimeter

Find. Repair. Validate. Report.

The 279 FC is a full-featured digital multimeter with integrated thermal imaging and is designed to increase your productivity and confidence. The thermal multimeter helps you find, repair, validate, and report many electrical issue quickly so that you are confident problems are solved.

Locate the problem immediately

Scanning with the 279 FC's thermal imager reveals many electrical issues rapidly and from a safe distance. By combining two tools into one, the thermal multimeter lightens the load and increases productivity

Expanded functionality

Compatible with iFlex® (a flexible current clamp) to expand your measurement capabilities and get into tight, hard to reach spaces for current measurement (up to 2500 A AC). large full-color LCD screen for easier and clearer viewing of images and readings

Communicate your results

With built-in Fluke Connect®, transmit results wirelessly to a smartphone and save time on reporting to validate work is complete. Troubleshoot better by instantly trending and monitoring measurements live on your smartphone screen. Create and email reports right from the field.

FLUKE CONNECT™

With built-in Fluke Connect, transmit results wirelessly to a smartphone and save time on reporting to validate work is complete.

Specifications

DMM	
Voltage ac/dc	1000 V
Current ac	2500 A ac (with iFlex Flexible Current probe)
Resistance	50 M Ω
Frequency	100 kHz
Capacitance	9,999 µF
Continutity/Diode test/ Min Max/Display hold	•
Infrared camera	
Resolution	80 x 60
Temperature range	-10 °C to 200 °C (14 °F to 392 °F)
Other	
Safety rating	CAT III 1000 V, CAT IV 600 V
Warranty	Three year

Ordering information

Models	Included accessories
FLUKE-279 FC/iFlex TRMS Thermal Multimeter	45.72cm (18in) iFlex current probes, (1 pair) TL75 test leads., rechargeable lithium ion battery charger, soft carrying case, hanging strap

Optional accessories
Fluke i2500-10 iFlex flexible current probe/ Fluke i2500-18 iFlex flexible current probe/ Fluke BC500 AC power charger/Fluke BP 500 lithium ion battery 300mAh

***Fluke Connect (FC) system is not available in all countries. Non-FC models are available. Check with your local authorized Fluke distributers for more info.**

Quickly find, repair, validate and report many electrical issues.

Fluke 3000 FC True-rms Wireless Multimeter

Reduce the risk of arc flash and stay safe

The Fluke 3000 FC True-rms Wireless Multimeter and Fluke Connect wireless test tools keep you safe from hazardous measurement situations. Just deenergize the cabinet, open the panel while wearing PPE and connect the remote modules, whether they are voltage modules, current clamps, flexible current loops or thermometers. Then, from a safe distance, read the results on the 3000 FC True-rms Wireless Multimeter.

You can display the meter measurement, plus readings from up to three wireless modules.Better still, the Fluke 3000 FC True-rms Wireless Multimeter can send measurement data to your smartphone, so you can save and share measurements from the field with your team anytime, from anywhere.

The Fluke 3000 FC True-rms Wireless Multimeter with the Fluke Connect® app has all the essentials for convenient test and measurement troubleshooting.

- AC and dc voltage measurements to 1000 V
- AC and dc current with 0.01 mA resolution
- Continuity, resistance, diode test, capacitance and frequency measurements
- Min/Max recording
- CAT III 1000 V, CAT IV 600 V; IP54

Specifications

Functions	Range and resolution	Basic accuracy
AC voltage	600.0 mV, 6.000 V, 60.00 V, 600.0 V, 1000 V	1.0 % + 3
DC voltage	600.0 mV, 6.000 V, 60.00 V, 600.0 V, 1000 V	0.09 % + 2
Continuity		Meter beeps at < 25 Ω, beeper detects opens or shorts of 250 µs or longer
Resistance	600 Ω, 600.0 Ω, 6.000 kΩ, 60.00 kΩ, 60.00 kΩ, 600.0 kΩ, 50.00 MΩ	0.5 % + 1
Diode test	2.000 V	1 % + 2
Capacitance	1000 nF, 10.00 µF, 100.0 µF, 9999 µF[1]	1.2 % + 2
mA AC (45 Hz to 1 kHz)	60.00 mA, 400.0 mA[3]	1.5 % + 3
mA dc[2]	60.00 mA, 400.0 mA[3]	0.5 % + 3
Frequency	0.01 Hz, 0.1 Hz, 0.001 kHz, 0.01 kHz	0.1 % + 1

[1] In the 9999 µF range for measurements to 1000 µF, the measurement accuracy is 1.2 % + 2.

[2] Input burden voltage (typical): 400 mA input 2 mV/mA.

[3] 400.0 mA accuracy specified up to 600 mA overload.

For all specifications: accuracy is specified for one year after calibration, at operating temperatures of 18 °C to 28 °C, with relative humidity at 0 % to 90 %. Accuracy specifications take the form of ± ([% of Reading] + [Number of least significant digits]). (Not compatible with Fluke CNX test tools)

Ordering information

Models	Included accessories
FLUKE-3000FC FC Wireless Digital Multimeter	Test leads, alligator clips, holster, AA batteries installed, information packet

Kits—buy more, save more

FC Wireless v3003 AC-DC Voltage Measurement Kit

FC Wireless t3000 Temperature Kit

Recommended accessories

TL175 TwistGuard™ Test Leads

C3004 Soft Case

***Fluke Connect (FC) system is not available in all countries. Non-FC models are available. Check with your local authorized Fluke distributers for more info.**

Fluke 170 Series Digital Multimeters

Maintenance experts can find most electrical and HVAC problems

The Fluke 170 Series True-rms Multimeters is simple to use with significant improvements over the original Fluke 70 Series.

- Wide 1000 V measurement range
- True-rms for precise measurement of non-linear signals
- Capacitance, resistance, continuity and frequency
- Built-in thermometer (Fluke 179 only)
- Backlight for work in dimly lit areas (Fluke 177 and 179 only)
- Min/Max/Avg to record signal fluctuations
- Display hold and auto hold
- Manual and automatic ranging
- Basic dc accuracy (179/0.09 %, 177/0.09 %, 175/0.15 %)
- Also available: 177 with true-rms and backlight and 175 with true-rms

Specifications

Functions	Range and resolution	Basic accuracy
DC voltage	600.0 mV, 6.000 V, 60.00 V, 600.0 V, 1000 V	± 0.09 % (Models 177 and 179) ± 0.15 % (Model 175)
AC voltage[1]	600.0 mV, 6.000 V, 60.00 V, 600.0 V, 1000 V	± 1.0 % of reading
DC current	60.00 mA, 400.0 mA, 6.000 A, 10.00 A[2]	± 1.0 % of reading
AC current[2]	60.00 mA, 400.0 mA, 6.000 A, 10.00 A[2]	± 1.5 % of reading
Resistance	600.0 Ω, 6.000 kΩ, 60.00 kΩ, 600.0 kΩ, 6.000 MΩ, 50.00 MΩ	± 0.9 % of reading
Capacitance	1000 nF, 10.00 µF, 100.0 µF, 9999 µF	± 1.2 % of reading
Frequency[3]	99.99 Hz, 999.9 Hz, 9.999 Hz, 99.99 kHz	± 0.1 % of reading
Temperature (179 only)	-40 °C to +400 °C (-40 °F to +752 °F)	1.0 % of reading
Battery life	200 hours typical for alkaline	
Dimensions (HxWxL)	4.3 cm x 9.0 cm x 18.5 cm (1.7 in x 3.5 in x 7.3 in)	

[1] All ac voltage and ac current ranges are specified from 5 % of range to 100 % of range.

[2] 10 A continuous, 20 A for up to 30 seconds.

[3] Voltage frequency is specified from 2 Hz to 100 kHz. Current frequency is specified from 2 Hz to 30 kHz.

Ordering information

Models	Included accessories
FLUKE-179 Digital Multimeter	Test leads, temperature probe, 9 V battery (installed), manual
FLUKE-177 Digital Multimeter	Test leads, 9 V battery (installed), manual
FLUKE-175 Digital Multimeter	Test leads, 9 V battery (installed), manual

Kits—buy more, save more

179/EDA2 Electronics Multimeter and Deluxe Accessory Combo Kit

Recommended accessories

TLK-225 SureGrip™ Master Accessory Set

C25 Meter Case

Fluke 289 and 287 True-rms Logging Multimeters

Find little problems before they become big ones

The Fluke 289 and 287 are high performance industrial logging multimeters. The large 50,000 count, 1/4 VGA dot matrix display and multiple on screen displays give you sharp, clear readings. Use the logging function with expanded memory for unattended monitoring of signals over time. With on-board TrendCapture, you can graphically review up 10,000 recorded events and logged readings. Then, zoom on trend provides an unprecedented ability to zoom in up to 14 times to view and analyze data—all without needing a PC.

- Two terminal 50 ohm range with 1 milliohm resolution, 10 mA source current. Useful for measuring and comparing differences in motor winding resistance or contact resistance (289)
- Low-pass filter for accurate voltage and frequency measurements on adjustable speed motor drives and other electrically noisy equipment (289)
- Add the wireless data logging capabilities of Fluke Connect® with Share-Live™ video call with the if3000 FC connector
- True-rms ac bandwidth 100 kHz; dBV/dBm; dc mV resolution 1 µV; Megohm range up to 500 MΩ
- Conductance 50.00 nS
- Min/Max/Avg/duty cycle/pulse width
- Isolated optical DMM interface with USB PC connection
- Over 200 hours logging capacity with new power saving function
- Lo Ohm capability; Lo Z volts; Lo Pass Filter

Specifications

Functions	Range and resolution	Basic accuracy
AC or dc voltage	50.000 mV, 500.00 mV, 5.0000 V, 50.000 V, 500.00 V, 1000.0 V	0.025 % 0.4 % (true-rms) (ac)
AC current dc current	500.00 µA, 5000.0 µA, 50.000 mA, 400.00 mA, 5.0000 A, 10.000 A	0.15 % 0.7 % (true-rms)
Temperature (excluding probe)	-200.0 °C to 1350.0 °C (-328.0 °F to 2462.0 °F)	1.0 %
Resistance	50.000 Ω, 500.00 Ω, 5.0000 kΩ, 50.000 kΩ, 500.00 kΩ, 5.0000 MΩ, 50.00 MΩ, 500.0 MΩ	0.05 %
Capacitance	1.000 nF,10.00 nF, 100.0 nF, 1.000 µF, 10.00 µF, 100.0 µF, 1000 µF, 10.00 mF, 100 mF	1.0 %
Frequency	99.999 Hz, 999.99 Hz, 9.9999 kHz, 99.999 kHz, 999.99 kHz	.005 %

Ordering information

Models	Included accessories
FLUKE-289 True-rms Industrial Logging Multimeter with TrendCapture	Test leads, alligator clips, holster, AA batteries installed, information packet
FLUKE-287 True-rms Electronics Logging Multimeter with TrendCapture	Test leads, alligator clips, holster, AA batteries installed, information packet

FLUKE CONNECT™

Kits—buy more, save more

289/FVF True-rms Industrial Logging Multimeter Combo Kit with TrendCapture

Recommended accessories

TL175 TwistGuard™ Test Leads

ir3000 FC Connector

***Fluke Connect (FC) system is not available in all countries. Non-FC models are available. Check with your local authorized Fluke distributers for more info.**

Fluke 87V Industrial Multimeters

The perfect DMM for a heavy industrial environment

The Fluke 87V Industrial Multimeter has measurement functions, trouble-shooting features, resolution and accuracy to solve industrial problems on motor drives, in-plant automation, power distribution and electro-mechanical equipment. The Fluke 87V Industrial Multimeter offers a unique function for accurate voltage and frequency measurements on adjustable speed motor drives and electrically noisy equipment. The large digit display with a bright, two level backlight makes it significantly easier to read.

Electrical safety

All inputs are protected to CAT III 1000 V and CAT IV 600 V. They can withstand impulses in excess of 8,000 V to help protect you from arc blast resulting from surges and spikes.

- Measure 20 A for up to 30 seconds, 10 A continuously
- Expanded capacitance range to 10,000 µF
- Peak capture to record transients as fast as 250 µs
- Measure up to 1000 V ac and dc
- Auto and manual ranging for maximum flexibility
- Frequency to 200 kHz and % duty cycle
- Min/Max/Avg recording to capture variations automatically
- Relative mode to remove test lead resistance from low ohms measurements
- Also available as 83V average responding multimeter

Specifications

Functions	Range and resolution	Basic accuracy	
		87V	83V
DC voltage	600.0 mV, 6.000 V, 60.00 V, 600.0 V, 1000 V	0.05 %	0.1 %
AC voltage	600.0 mV, 6.000 V, 60.00 V, 600.0 V, 1000 V	0.7 % (true-rms)	0.5 %
DC current	600.0 µA, 6000 µA, 60.00 µA, 600.0 mA, 6.000 A, 10.00 A	0.2 %	0.4 %
AC current	600.0 µA, 6000 µA, 60.00 µA, 600.0 mA, 6.000 A, 10.00 A	1.0 % (true-rms)	1.2 %
Temperature (excluding probe)	-200 °C to 1090 °C (-328 °F to 1994 °F)	1.0 %	
Temperature probe	-40 °C to 260 °C (-40 °F to 500 °F)	2.2 °C or 2 %	
Resistance	600.0 Ω, 6.000 kΩ, 60.00 kΩ, 600.0 kΩ, 6.000 MΩ, 50.00 MΩ	0.2 %	0.4 %
Capacitance	10.00 nF, 100.0 nF, 1.000 µF, 10.00 µF, 100.0 µF, 9,999 µF	1.0 %	1.0 %
Frequency	199.99 Hz, 1.9999 kHz, 19.999 kHz, 199.99 kHz	0.005 %	0.005 %
Battery life	400 hours typical with backlight off		
Dimensions (LxWxD)/ Weight	201 mm x 98 mm x 52 mm (7.9 in x 3.8 in x 2 in)/355 g (22 oz)		

Ordering information

Models	Included accessories
FLUKE-87-5 Industrial True-rms Multimeter with Temperature	Test leads, alligator clips, holster, batteries (installed), temperature probe (87V only), information packet
FLUKE-83-5 Industrial Multimeter	Test leads, alligator clips, holster, batteries (installed), temperature probe (87V only), information packet

Kits—buy more, save more

87V/E2 Industrial Electrician's Combo Kit

Recommended accessories

AC285 SureGrip™ Alligator Clips

CXT80 Extreme Case

Fluke 27 II, 28 II and 28 II Ex Digital Multimeters

Designed for tough work environments

The 27 II, 28 II and 28 II Ex Digital Multimeters all have IP67 waterproof and dustproof rating. They also have an extended operating temperature range of –15 °C to +55 °C (5 °F to 131 °F) and 95 % humidity. These meters offer unique functions for accurate voltage and frequency measurements on adjustable speed motor drives and electrically noisy equipment (28 II and 28 II Ex). A built in thermometer allows you to take temperature readings without having to carry a separate instrument.

- Resistance and continuity. Relative mode to remove test lead resistance from low ohms measurements
- MSHA, CSA and TÜV approvals (27 II, 28 II)
- Intrinsically safe certifications from the world's leading certification bodies (28 II Ex, pg 67)
- Tested to withstand a 3 m (10 ft) drop
- Wide 1000 V measurement range
- True-rms ac voltage and current for accurate measurements on non-linear signals (28 II, 28 II Ex)
- Low pass filter (28 II, 28 II Ex)
- Average responding voltage and current measurements (27 II)
- 10 A continuous (20 A for 30 seconds)
- Frequency and capacitance
- Record signal fluctuations using the Min/Max function

Specifications

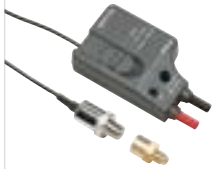
	27 II	28 II	28 II Ex
Volts ac, dc	1000 V		
Amps ac, dc	10A		
Resistance	0.1 Ω to 50 MΩ		
Display counts	6000	6000/19,999	6000/19,999
Temperature		-200 °C to +1090 °C	-200 °C to +1090 °C
Low pass filter (measurement on VSD's)		•	•
Safety rating (EN 61010)	CAT IV 600 V, CAT III 1000 V		
Measurement method	Avg. responding	True-rms	True-rms
Power	Three AA batteries		
Battery life	800 hours		400 hours
Dimensions (DxWxH)	6.35 cm x 10.0 cm x 19.81 cm (2.5 in x 3.93 in x 7.8 in)		
Weight with holster	698.5 g (1.54 lb)		

Ordering information

Models	Included accessories
FLUKE-28-II Industrial Multimeter	Test leads, temperature probe, alligator clips, batteries, holster, information pack
FLUKE-28-II EX Intrinsically Safe Industrial Multimeter See page 67 for more information	Test leads, temperature probe, alligator clips, batteries, holster, information pack
FLUKE-27-II Industrial Multimeter	Test leads, temperature probe, alligator clips, batteries, holster, information pack

Recommended accessories

TLK-225 SureGrip™ Master Accessory Set



PV350 Pressure-Vacuum Module

TL225 Stray Voltage Adapter Test Lead Kit

C550 Tool Bag

Fluke 233 Remote Display Digital Multimeter

Now, you can be in two places at once

The Fluke 233 Remote Display Digital Multimeter has a removable display that solves several problems. First, you no longer have to hold both the meter and the test leads to make a measurement. Second, it allows you to measure where the measurement point is separated from controls or where the operator can't stay close to the meter during measurements due to various hazards or moving machinery. Third, Fluke's wireless technology allows the display to be carried up to 9 m (30 feet) away from the point of measurement for added flexibility and the removable magnetic display can be conveniently mounted where it is easily seen.

- Low-power 802.15.4 wireless technology does not interfere with measurement accuracy
- Use as a conventional multimeter when the display is connected
- True-rms ac voltage and current; built-in thermometer
- Radio transmitter automatically turns off when the display is connected to the meter
- Record signal fluctuations using the Min/Max function
- Measure up to 1000 V ac and dc
- Measure up to 10 A (20 A for 30 seconds)
- 10,000 µF capacitance range
- Frequency up to 50 kHz
- Resistance, continuity and diode test
- Min/Max/Avg recording to capture variations automatically
- New, improved battery life

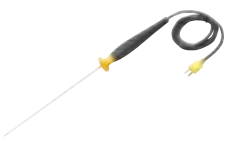
Specifications

Functions	Specifications	
DC voltage	Range	0.1 mV to 1000 V
	Accuracy	0.25 % + 2
AC voltage	Range	0.1 mV to 1000 V
	Accuracy	1.0 % + 3
DC current	Range	0.001 A to 10 A
	Accuracy	1.0 % + 3
AC current	Range	0.001 A to 10 A
	Accuracy	1.5 % + 3
Resistance	Range	0.1 Ω to 40 MΩ
Capacitance		1000 nF to 9999 µF
Frequency		0.1 Hz to 50.00 kHz
Temperature		-40 °C to +400 °C (-40 °F to 752 °F)
Power		Three AA batteries main body, two AA batteries display module
Battery life		400 hours
Safety rating		CAT IV 600 V, CAT III 1000 V
Size (HxWxL)		5.3 cm x 5.3 cm x 19.3 cm (2.08 in x 2.08 in x 7.6 in)
Weight		604 g (1.3 lb)

Ordering information

Models	Included accessories
FLUKE-233 Remote Display Multimeter	Test leads, temperature probe, alligator clips, batteries, information pack

Recommended accessories



80PK-22 SureGrip™ Immersion Temperature Probe

80AK-A Thermocouple Adapter

TL220 SureGrip™ Industrial Test Lead Set

TLK289 SureGrip™ Industrial Master Test Lead Set and Case

Fluke 11X Series True-rms Digital Multimeters

Dependable DMMs for electrical and HVAC purposes

The Fluke 117 Digital Multimeter includes integrated non-contact voltage detection to help get the job done faster. The Fluke 115 Digital Multimeter is the solution for a wide variety of electrical and electronic testing applications.

The Fluke 116 Digital Multimeter was specifically designed for the HVAC professional. The Fluke 114 Digital Multimeter is the best troubleshooting tool for "go/no-go" testing and the 113 is a basic electrical and utility multimeter.

- VoltAlert™ technology for integrated non-contact voltage detection (117)
- AutoVolt feature for automatic ac/dc voltage selection (117, 116, 114)
- Built in thermometer for HVAC applications (116)
- Microamps to test flame sensors (116)
- VCHEK™ LoZ low impedance measurement function to simultaneously test for voltage or continuity (113)
- LoZ: Low input impedance prevents false readings due to "ghost voltage" (117, 116, 114)
- Min/Max/Avg to record signal fluctuations
- Large display and white LED backlight to work in poorly lit areas more effectively
- Compact ergonomic design for one-handed operation

600 V CAT III · 600 V CAT IV · True RMS

113 only

ToolPak™ compatible

Specifications

Functions	117	116	115	114	113
AC/DC voltage	600 V	600 V	600 V	600 V	600 V
AC/DC current	10 A	600.0 µA	10 A		
Resistance	40 MΩ	40 MΩ	40 MΩ	40 MΩ	60 kΩ
Capacitance	1 nF to 9,999 µF	1 nF to 9,999 µF	1 nF to 9,999 µF		
Diode test	•		•		•
Frequency	5 Hz to 99.99 kHz	5 Hz to 99.99 kHz	5 Hz to 99.99 kHz		
Temperature		+400 °C			
Safety rating	CAT III 600 V	CAT III 600 V	CAT III 600 V	CAT III 600 V	CAT IV 600 V

Ordering information

Models	Included accessories
FLUKE-117 Multimeter with Non-Contact Voltage	Test leads, holster, users manual and 9 V battery (installed)
FLUKE-116 HVAC Multimeter with Temperature and Microamps	Test leads, integrated temperature probe, holster, users manual and 9 V battery (installed)
FLUKE-115 Multimeter	Test leads, holster, users manual and 9 V battery (installed)
FLUKE-114 Electrical Multimeter	Test leads, holster, users manual and 9 V battery (installed)
FLUKE-113 Utility Meter	Test leads, holster, users manual and 9 V battery (installed)

Kits—buy more, save more

117/323 Electrician's Combo Kit

116/62 MAX+ HVAC Combo Kit

Recommended accessories

TL175 TwistGuard™ Test Leads

C115 Soft Carrying Case

Fluke 88V and 77 IV Digital Multimeters

Fluke 88V Automotive Multimeter—designed to help automotive professionals solve problems faster

The Fluke 88V Automotive Multimeter has the measurement functions, troubleshooting features and accuracy to solve virtually any problem with conventional and hybrid vehicles.

- Automotive test functions include dc and ac voltage, resistance and current
- Min/Max recording for logging the highest and lowest readings over time
- Frequency measurements for magnetic sensors and ac/dc frequency signals
- Duty cycle for variable duty cycle signals with selectable trigger, slope and level
- Pulse width for fuel injector on-time measurements
- Conductance testing for secondary ignition coils
- RPM measurements for DIS and conventional ignition systems
- Built-in thermometer

Fluke 77 IV Digital Multimeter—use to repair most electrical and electronic problems

The Fluke 77 IV Digital Multimeter is simple to use and has significant improvements over Fluke's original 70 Series with more measurement functions, conformance to the latest safety standards, and a much larger display that is easier to view.

- Wide 1000 V measurement range
- Average responding ac measurements
- 0.3 % accuracy
- 10 amps continuous
- Frequency and capacitance
- Resistance and continuity
- Min/Max to record signal fluctuations
- Auto and manual ranging

Specifications

	88V	77IV
DC voltage	1000 V	1000 V
AC voltage	1000 V	1000 V
DC current	10 A	10 A
AC current	10 A	10 A
Resistance	50 MΩ	50 MΩ
Capacitance	9,999 µF	9,999 µF
Frequency	200.00 kHz	99.99 kHz
Duty Cycle	99.9 %	
Temperature	1994.0 °F (1090 °C)	
Conductance	60.00 nS	

Ordering information

Models	Included accessories
FLUKE-88-5 Automotive Multimeter	Test leads, 9 V battery (installed), information packet
FLUKE-77-4 Digital Multimeter	Test leads, 9 V battery (installed), information packet

Kits—buy more, save more

88V/A Automotive Multimeter Combo Kit

Recommended accessories

TLK282 Deluxe Automotive Test Lead Kit (88V)

TLK-225 SureGrip™ Master Accessory Kit (77 IV)

C35 Soft Carrying Case

FLUKE®

Earth Ground Testers

Selection guide

	1630-2	1621	1623-2	1625-2
2-Pole (ac) resistance measurement		•	•	•
3-Pole earth measurement		•	•	•
Measurement frequency—128 Hz		•	•	
4-Pole earth ground and soil resistivity measurement			•	•
Selective testing			•	•
Stakeless testing (ground loop resistance)	•		•	•
Memory			•	•
USB port			•	•
Automatic Frequency Control (AFC) 94 Hz to 128 Hz				•
R* measurement				•
Adjustable limits				•

Fluke 1625-2 and 1623-2 Geo Earth Ground Testers

Simpler, faster testing

Grounding testers, like the Fluke 1623-2 and 1625-2, help maintain uptime and lower the risk of electric shock to users while helping solve intermittent power quality problems. The Fluke earth ground testers perform all four essential earth ground test methods that users demand:

- 3- and 4-pole Fall of Potential, earth resistance loop testing
- 4-pole soil resistivity testing
- Selective earth ground testing using one clamp
- Stakeless earth ground testing using two clamps

Faster setup, easier testing and deployment of wire reels and stakes.

The 1623-2 and 1625-2 also make earth grounding tests faster and easier than previous methods because of automatic data collection and storage and faster setup. Color coded wires for easier identification and deploying of wire reels and stakes.

- IP56 rated for outdoor use
- USB data storage and transfer
- Automatic Frequency Control (AFC)—identifies existing interference and chooses a measurement frequency to minimize its effect, providing more accurate earth ground value
- R* measurement—calculates earth ground impedance at 55 Hz to more accurately reflect the earth ground resistance that a fault-to-earth ground would see
- Adjustable limits—for quicker testing

Clamp-on transformer accessory for ground loop measurements on transmission pylons.

Ordering information

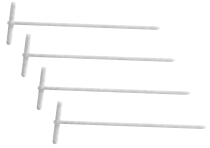
Models	Included accessories
FLUKE-1625-2 Advanced GEO Earth Ground Tester	Two test leads, USB cable, batteries, quick reference guide, users manual
FLUKE-1623-2 Basic GEO Earth Ground Tester	Two test leads, USB cable, batteries, quick reference guide, users manual
FLUKE-1625-2 KIT Advanced GEO Earth Ground Tester Kit	Two test leads, USB cable, 2 clamps (1 source, 1 sensing), carrying case, 4 earth ground stakes, 3 color coded cable reels, batteries, quick reference guide, users manual
FLUKE-1623-2 KIT Basic GEO Earth Ground Tester Kit	

These products are for unpowered installations measuring grounding connections.

Kits—buy more, save more

Fluke 1625-2 Kit

Recommended accessories



ES-162P4-2 Stake/reel set for 4-pole measurement

EI-1625 Selective/ stakeless clamp set for 1625-2

EI-162BN 320 mm (12.6 in) Split Core Transformer for use with Fluke 1625-2

Fluke 1621 Basic Earth Ground Tester

Earth ground tester for resistance measurement

The Fluke 1621 Earth Ground Tester is a rugged, easy-to-use tester for three-pole ground resistance measurements and two-pole ac resistance measurements.

Earth ground resistance is measured by installing earth ground test electrodes, and testing. With a simple user interface and intuitive functionality, the large, clear LCD display provides high visibility results in daylight or poor lighting conditions.

- Three-pole earth resistance measurements
- Two-pole AC resistance measurements
- Large dual backlit display
- Limit settings for automatic measurement evaluation
- CAT II 600 V
- Two-year warranty

Ordering information

Models	Included accessories
FLUKE-1621 Basic Earth Ground Tester	Two measuring leads with alligator clips, 2 m (6 ft), yellow protective holster, 9 V alkaline battery (LR61), users manual, CD

FLUKE CONNECT™

Fluke 1630-2 FC Earth Ground Clamp Meter

Stakeless earth ground loop and ac leakage current clamp for fast, safe indoor/outdoor earth ground resistance and ac leakage current tests.

The Fluke 1630-2 FC Stakeless Earth Ground Clamp identifies earth ground leakage currents without disconnecting the earth ground rod from the grounding system – ideal for system troubleshooting. Heavy-duty clamp jaw stays in alignment and in calibration even in every day, on-the-job industrial environments.

The 1630-2 FC supports the Fluke Connect Wireless System (may not be available in all regions). Fluke Connect wirelessly connects the clamp with an app on your smartphone or tablet. The app shows the ground resistance measurements on your smartphone or tablet display. You can save these measurements, GPS location from your phone and images to Fluke Connect Cloud storage and share with your team.

- Logging Measurements – Save time by automatically recording data at pre-set intervals. Save up to 32,760 measurements in memory at the set logging interval.
- Quick and easy use- no earth ground stakes are necessary
- Measures ground resistance from 0.025 Ω to 1500 Ω
- Alarm Threshold – User-defined high / low alarm limits, for rapid measurement evaluation.
- Band-Pass Filter – Selectable band-pass filter function removes unwanted noise from the ac leakage current measurement.
- Warranty – One year

Take leakage current or ground measurements on grounding systems with multiple parallel grounding electrodes (transformers, utility grounds, transmission tower grounds, and communication ground systems).

Ordering information

Models	Included accessories
FLUKE-1630-2 FC Earth Ground Loop and Leakage Clamp	Earth Ground clamp, hard case, loop resistance standard, 4 AA batteries, safety information guide and quick reference guide

Kits—buy more, save more

Fluke 1621 Tester

Recommended accessories

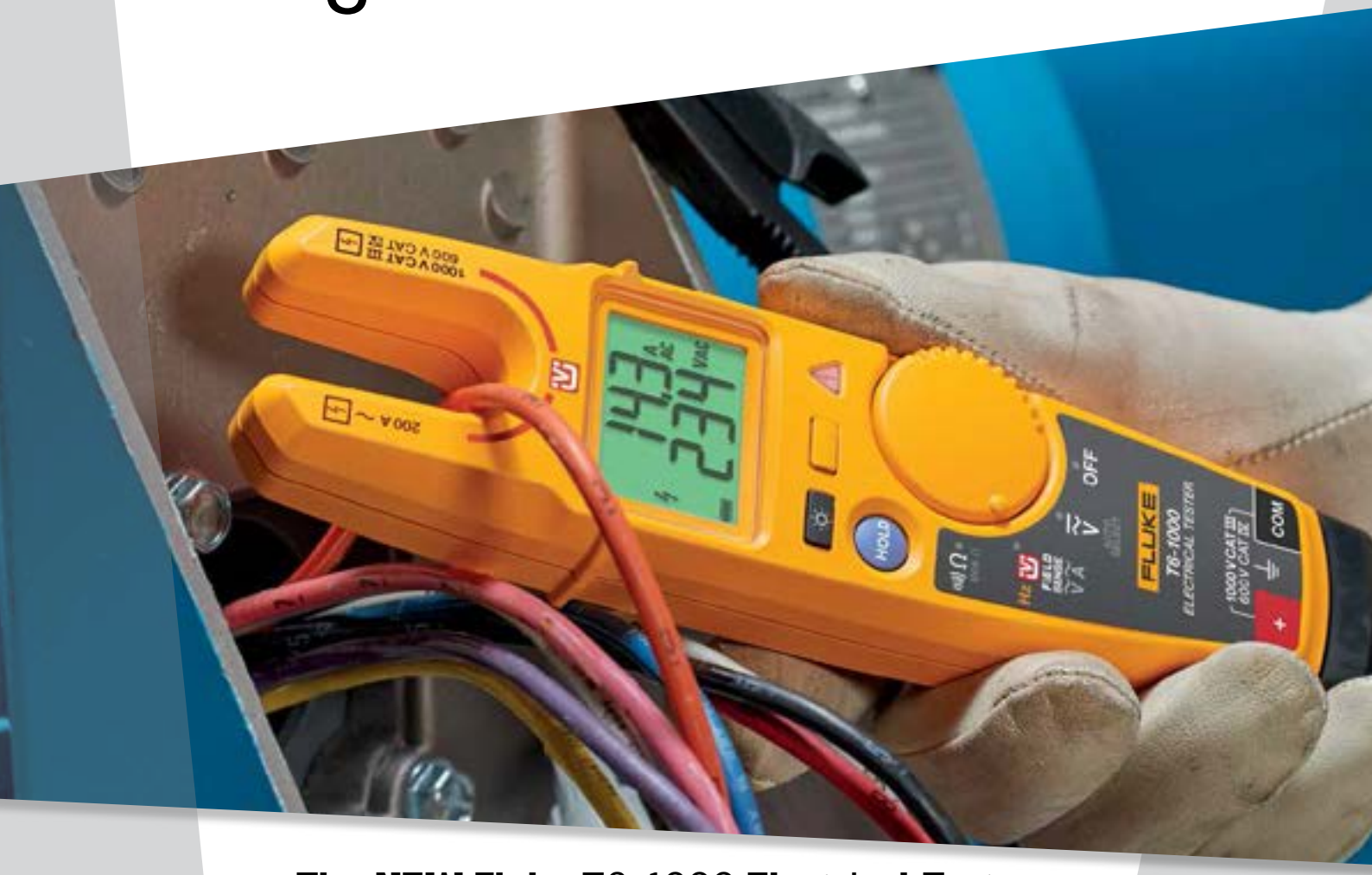
Cable Reel 50 m Ground/earth wire (162.5 ft) for 1621

Cable Reel 25 m Ground/earth wire (81.25 ft) for 1621

ES-162P3 Stake/reel set for 3-pole measurements for 1621

Electrical Testers

~~You can't~~ measure voltage without test leads



The NEW Fluke T6-1000 Electrical Tester

Now measure voltage the same way you measure current, without test lead contact to live voltage. FieldSense technology lets you slide the open fork over a conductor and see the voltage level.[1]

BE SAFER Measure voltage to 1000 V ac through the open fork, without test leads.

BE FASTER No need to open covers or remove wire nuts.

BE MORE EFFICIENT Simultaneously measure voltage and current.

BE EVERYWHERE 17.8 mm open fork is widest in the industry; measure up to 200 A on 4/0 wires (120 mm^2).

[1] Requires capacitive path to ground, provided through user in most applications. Ground connection via test lead may be required in some situations.

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NEW

Fluke T6 Electrical Testers

Measure voltage … without test leads

Measure voltage up to 1000 V ac through the open fork, without test lead contact to live voltage.+ Without opening covers or removing wire nuts. On wires up to AWG 4/0 (120 mm²), carrying as much as 200 A. It will change your job. Safer. Faster. Easier.

Product Highlights

- FieldSense technology for ac voltage, current and frequency measurement without making electrical contact to live voltage+
- Simultaneous voltage and current display (T6-1000) – shows all power supply measurements at a glance for efficient trouble shooting for motors and other appliances
- 1 to 1000 V ac or dc (T6-1000); 600 V ac or dc (T6-600)
- 0.1 to 200 A ac
- Resistance 1 Ω to 100 kΩ (T6-1000), 1 Ω to 2000 Ω (T6-600)
- Frequency measurement 45 Hz to 66 Hz (T6-1000)
- Works with most wire up to AWG 4/0 (17.8 mm jaw opening)
- HOLD button temporarily freezes the reading for easy viewing
- Easy to read display with backlight
- Accepts optional Fluke TPAK Magnetic Meter Hanger for convenient operation
- Standard two-year warranty

+ Voltage measurement requires capacitive path to ground, provided through user in most applications. Ground connection via test lead may be required in some situations.

Specifications

Measurement Specifications		T6-1000	T6-600		
Function	Requires	Range	Range	Resolution	Accuracy[1]
FieldSense ac voltage	No	1000 V	600 V	1 V	±(3 % + 3 counts) 45 Hz – 66 Hz[2] [3]
FieldSense ac current	No	200.0 A	200.0 A	0.1 A	±(3 % + 3 counts) 45 Hz – 66 Hz
FieldSense frequency (Hz)	No	45 Hz – 66 Hz	-	1 Hz	±(1 % + 2 counts) [3]
Volts ac	Yes	1000 V	600 V	1 V	±(1.5 % + 2 counts) 45 Hz – 66 Hz
Volts dc	Yes	1000 V	600 V	1 V	±(1 % + 2 counts)
Resistance	Yes	2000 Ω	2000 Ω	1 Ω	±(1 % + 2 counts)
	Yes	20.00 kΩ	-	0.01 kΩ	
	Yes	100.0 kΩ	-	0.1 kΩ	

Accuracy1: ± ([% of reading] + [number of least significant digits]). Accuracy is specified for 1 year after calibration, at 18 °C to 28 °C (64 °F to 82 °F) with relative humidity to 90 %. AC conversions are ac-coupled, RMS responding.
Accuracy2: Add 3 % without an external ground connection. External ground connection required for user wearing insulated gloves, standing on an insulated ladder, or otherwise insulated from earth ground.
Accuracy3: FieldSense is specified from 16 V to 100 % of range.

General Specifications	
Calibration	1-year calibration cycle
Dimensions	61 mm x 259 mm x 43 mm
Weight	0.35 kg (0.78 lb)
Fork opening	17.8 mm
Battery: Type,Life	2x AA (IEC LR6): 360 hour continuous, typical is 200 hour using the FieldSense function

Ordering information

Models	
FLUKE-T6-600 Electrical Tester	Includes: Attached test leads with removable 4 mm probe caps, user documentation
FLUKE-T6-1000 Electrical Tester	Includes: Attached test leads with removable 4 mm probe caps, user documentation

Optional accessories

H-T6 Belt Holster / TPAK Hanger / PRV240FS Proving Unit / TP1 Probe Set, Flat-Blade
AC285 SureGrip Alligator Clips / AC220 SureGrip Alligator Clips
Service Information Sheet, PN 686953

Fluke T5, T+PRO and T+ Electrical Testers and VoltAlert™

Fluke T+PRO and T+ Electrical Testers

- Three forms of ac/dc voltage detection: Light, sound and vibration
- Detects live voltage even when batteries are dead
- Extra heavy-duty, replaceable test leads
- Rotary field indicator for troubleshooting three-phase systems
- Continuity beeper, LED flashlight and GFCI trip

Fluke T5-1000 and T5-600 Voltage, Continuity and Current Testers

- Excellent front-line troubleshooting and measurement tool
- Available in 600 V and 1000 V models
- OpenJaw™ current measurement
- Rotary switch selects volts, amps and ohms functions
- Heavy-duty test leads

Fluke T5-1000

Fluke T+PRO

Specifications

	T+PRO	T+	T5-1000	T5-600
Measure ac/dc voltage	Preset 12 V, 24 V, 48 V, 120 V, 208 V, 240 V, 277 V (Canada 347 V), 480 V, 600 V		1000 V	600 V
Measure ac current (avg)			100 A	100 A
Measure continuity	•	•	< 25 Ω	< 25 Ω
Measure resistance	9.99 kΩ		1000 Ω	1000 Ω
DC polarity indicator			•	•
Detachable probe tips w/ optional tip styles	•	•	•	•
Digital display	•		•	•
Safety rating	CAT IV 600 V/ CAT III 1000 V	CAT IV 600 V/ CAT III 1000 V	1000 V Overvoltage CAT III	600 V Overvoltage CAT III
Warranty	Two-year	Two-year	Two-year	Two-year

*Voltage levels will vary depending on country of intended use.

Fluke LVD2

Fluke 1AC-II

Fluke 2AC

Ordering information

Models	Included accessories
FLUKE-T+PRO and T+PRO Electrical Tester	Attached test probes, lead wrap, users manual
FLUKE-T+ and T+ Electrical Tester	Attached test probes, lead wrap, users manual
FLUKE-T5-1000 1000 V Voltage, Continuity and Current Tester	Detachable probes and instruction sheet
FLUKE-T5-600 600 V Voltage, Continuity and Current Tester	Detachable probes and instruction sheet

Fluke VoltAlert™ Family

The next generation VoltAlert™ ac non-contact voltage testers from Fluke are easy to use. Electricians, maintenance, service and safety personnel, and homeowners can quickly test for energized circuits in the workplace or at home. Certified up to CAT IV 1000 V.

Specifications

	2AC	1AC-II	1LAC-II	LVD2
Voltage range	90 V ac to 1000 V ac	90 V ac to 1000 V ac	20 V ac to 90 V ac	90 V ac to 600 V ac
Audible alert		•	•	•
Flashlight				•
On/Off	Always on	•	•	•
Safety rating	CAT IV 1000 V	CAT IV 1000 V	CAT IV 1000 V	CAT IV 600 V

Ordering information

Models
FLUKE-2AC VoltAlert™ Voltage Detector
FLUKE-1AC-II VoltAlert™ Voltage Detector
FLUKE-1LAC-II VoltAlert™ Voltage Detector
FLUKE-LVD2 Volt Light

Fluke 1000FLT Fluorescent Light Tester

Take the trial and error out of fluorescent light testing

Save time and reduce costs by using the only tester that performs all five essential lighting tests in less than 30 seconds. The Fluke 1000FLT fluorescent light tester makes your job easier by quickly pinpointing problems and verifying operation of fluorescent lights and fixtures. It is easy to use and can survive on-the-job handling, including a two meter drop. Like all Fluke products, the 1000FLT is built to last, easy to maintain and is backed by a three-year warranty. Companies have made significant investments in fluorescent lighting; if your job requires keeping large numbers of these fluorescent lights shining, the Fluke 1000FLT is an indispensable tool.

- **Lamp test:** Test bulb without removing from fixture
- **Ballast test:** Easily determine if ballast is working
- **Non-contact voltage:** Quickly check for voltage presence
- **Pin continuity test:** Tests if filaments have continuity
- **Ballast-type test:** Determine if ballast is electronic or magnetic without taking fixture apart—identify energy wasting ballasts

Quickly check for voltage presence without touching a live conductor.

Easily determine if ballast is working.

Specifications

Functions	Measurements
Lamp test max output	3000 V peak-to-peak
Ballast test	20 kHz
Ballast type discriminator	≤3 m (10 ft) distance
Pin continuity test	< 1 kΩ
NCV (VoltAlert™)	85 V ac to 277 V ac 45 Hz to 67 Hz ≤ 10 cm (4 in) distance
Operating temperature	-10 °C to +50 °C (14 °F to +122 °F)
Storage temperature	Storage -40 °C to +60 °C (-40 °F to +140 °F)
Safety rating	IEC 61010-1, pollution degree 2
Warranty	Three-year

Ordering information

Models	Included accessories
FLUKE-1000FLT Fluorescent Light Tester	Quick reference guide, 4 AA alkaline batteries, holster

FLUKE
Gas Detectors

NEW

Fluke Ti450 SF6 Gas Detector

SF_6 gas leak detector combined with Fluke's top performing pistol grip infrared camera two tools in one.

Infrared for every day. SF_6 gas detection when you need it

- Increase efficiency and save money with a top performing infrared camera that delivers pinpoint, state-of-the-art SF_6 detection – conduct two critical functions with a single tool
- Best of all, it's affordable enough to own, so you can conduct infrared and gas inspections whenever and wherever you want without having to pay heavy rental charges or hire expensive contractors

Designed for dependability

- Using the technology from Fluke's top performing pistol grip camera, the Fluke Ti450 SF6 easily switches from infrared to gas mode with the turn of a dial. Making it easy to change modes on the fly when you are in the field

Two critical solutions in one remarkable IR camera

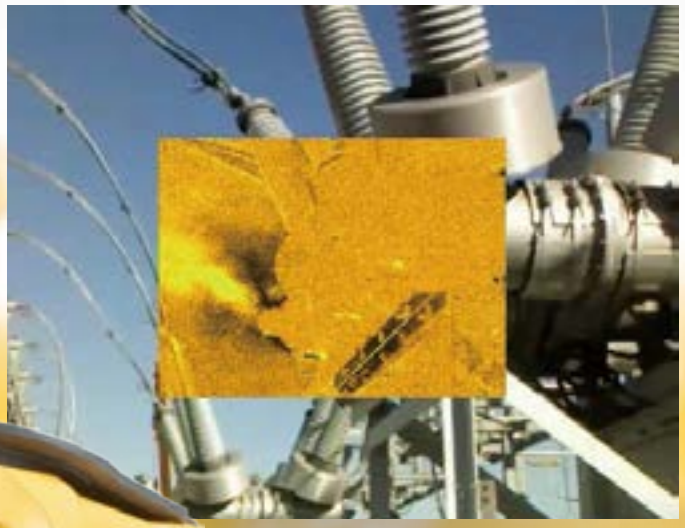
- With its pistol grip comfort and point-and-shoot convenience, even the tough spots become easy to diagnose
- With the added feature of SF_6 pinpoint detection, you can get the analysis you need anytime, anywhere

Specifications

Ti450 SF6 60Hz	
< 10 lbs annual gas loss rate	Excellent outdoor conditions necessary – large temperature difference between gas and background, no wind
10 to 50 lbs annual gas loss rate	Good outdoor conditions – moderate temperature difference between gas and background, no wind
> 50 lbs annual gas loss rate	Easy detection in moderate conditions
Specifications	
Detector resolution	320 x 240 (76,800 pixels)
SuperResolution on gas mode	320 x 240 (76,800 Pixels)
SuperResolution on infrared mode	640 x 480 (307,200 pixels)
Gas detection	Yes, SF_6 gas only
IFOV with standard lens (spatial resolution)	1.31 mRad, D:S 753:1
Field of view	24 °H x 17 °V
Minimum focus distance	15 cm (approx. 6 in)
IR Fusion® technology	Yes, on camera – full screen
MultiSharp™ Focus	Yes, focused near and far, throughout the field of view
LaserSharp® Focus	Yes, in-focus images with the touch of a button
Laser distance meter	Yes, calculates distance to the target for precisely focused images and displays distance on screen
Advanced manual focus	Yes

Ordering information

Models	Included accessories
FLUKE-Ti450 SF6 60 Hz Gas Detector and Infrared Camera	Infrared camera with standard lens, adjustable hand strap, AC power supply and battery pack charger (including universal AC adapters), two rugged lithium ion smart battery packs, USB cable, HDMI video cable, 4 GB micro SD card, HDMI eye piece, 2x Infrared Telephoto lens; tripod holder and rugged-hard carrying case. Available by free download SmartView® desktop software and user manual



Infrared for every day– SF_6 gas leak detection when you need it.

Introducing the first **gas detection/infrared camera** from Fluke, the Ti450 SF6 Gas Leak Detector

Increase efficiency and save money with a top performing every day infrared camera that delivers pinpoint SF_6 detection. Conduct two critical functions with a single tool whenever and wherever you want without having to pay heavy rental charges or hire expensive contractors.

Two tools in one, at a one-of-a-kind price.

FLUKE®

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Indoor Air Quality Tools

Indoor Air Quality Tools – Tools to help you maintain good IAQ

Fluke 971 Temperature Humidity Meter

Temperature and humidity are two important factors in maintaining optimal comfort levels and good indoor air quality. Quickly and conveniently take accurate humidity and temperature readings with the Fluke 971. The Fluke 971 is invaluable for facility maintenance and utility technicians, HVAC–service contractors, and specialists who assess indoor air quality (IAQ). The Fluke 971 the perfect tool for monitoring problem areas. It is built to perform and made to last.

- New and improved digital sensor for faster response times
- Backlit dual display of humidity and temperature
- Measures dew point and wet bulb temperatures
- 99 record storage capacity
- Compact and lightweight at 188 g (6.6 oz)
- Min/Max/Avg/Hold functions

Specifications

Functions	Measurements
Temperature range	-20 °C to 60 °C (-4 °F to 140 °F)
Relative humidity range	5 % to 95 %
Temperature update rate	500 ms
Temperature sensor type	NTC
Response time (humidity)	For 90 % of total range - 60 sec. with 1 m/s air movement
Humidity sensor	Electronic capacitance polymer film sensor
Battery type	4 AAA alkaline batteries
Battery life	200 Hours
Safety approval	Electromagnetic compatibility: Complies with EN 61326-1

Find how-to videos, application notes and other resources on the indoor air quality product pages on www.fluke.com

Fluke 985 Airborne Particle Counter

The Fluke 985 Particle Counter is ideal for troubleshooting and monitoring indoor air quality issues and verifying HVAC filter performance in critical locations, and is the perfect tool for the maintenance, HVAC, and IAQ professional.

- Six channels and particle size range of 0.3 µm to 10.0 µm
- Large 3.5 inch QVGA color display
- 10,000 record storage: Quick access to historical data
- On-screen data presentation
- Personalized setting and configurations
- Download data to a PC using a USB memory stick, USB cable or Ethernet connection
- USB/Ethernet charge cradle

Specifications

Functions	Measurements
Flow rate	2.83 L/min (0.1 cfm)
Light source	775 nm to 795 nm, 90 mW class 3B laser
Count modes	Raw counts, #/m^3, #/ft^3, #/liter in Cumulative or Differential mode
Counting efficiency	50 % @ 0.3 µm; 100 % for particles > 0.45 µm (per ISO 21501)
Zero count	1 count/5 minute (JIS B9921)
Concentration limits	10 % at 4,000,000 particles per ft^3 (per ISO 21501)
Sample inlet	Isokinetic probe
Operating environment	10 °C to 40 °C (50 °F to 104 °F)/< 95 % non-condensing relative humidity
Warranty	One-year

Monitor air humidity levels throughout your facility with the Fluke 971.

Ordering information

Models	Included accessories
FLUKE-985 Airborne Particle Counter	Certificate of Calibration (NIST traceable), cradle for charging and convenient USB and Ethernet communications, ethernet cable, USB cable, power supply, zero count inlet filter, filter adapter, sample inlet protective cap, hard case, manual
FLUKE-971 Temperature Humidity Meter	Four AAA alkaline batteries, users manual

Fluke 975 AirMeter™

Simple, all-in-one air diagnostics

The Fluke 975 AirMeter™ combines five powerful air quality tools into one.

- Simultaneously measures, logs and displays temperature, humidity, CO_2 and CO
- % of outside air calculation, one-touch air flow and velocity with available probe (975V)
- Dew point and wet bulb temperature
- CO_2 and CO field calibration feature
- Min/Max/Avg on all measured and calculated readings, audible and visual threshold alarms
- Discrete or continuous data logging capacity, downloadable to PC via USB interface
- Automatically compensates for barometric pressure changes
- Two-year warranty

Specifications

	Range	Display resolution	Accuracy
Temperature	-20 °C to 50 °C (-5 °F to 122 °F)	0.1 °C (0.1 °F)	± 0.9 °C/± 1.62 °F from 40 °C to 60 °C ± 0.5 °C/± 1.00 °F from 5 °C to 40 °C ± 1.1 °C/± 1.98 °F from -20 °C to 5 °C
Relative humidity	10 % to 90 % RH non-condensing	1 %	± 2 % RH (10 % RH to 90 % RH)
Air velocity	50.0 fpm to 3000 fpm 0.25 m/s to 15 m/s	1 fpm (0.005 m/s)	± 4 % or 4 fpm* ± 4 % or 0.02 m/s* whichever is greater * Accuracy specification only valid for velocity readings above 0.25 m/s
CO_2	0 ppm to 5000 ppm	1 ppm	Warm up time 1 min (5 minutes for full specification) 2.75 % + 75 ppm
CO	0 ppm to 500 ppm	1 ppm	± 5 % or ± 3 ppm, whichever is greater, @ 20 °C and 50 % RH

Fluke 922 Airflow Meter/Micromanometer

The Fluke 922 makes your job easier by combining differential pressure, airflow and velocity into a single, rugged meter.

- Measures differential and static pressure, air velocity and flow readings
- User-defined duct shape and size for maximum airflow accuracy
- Min/Max/Avg/Hold functions

Specifications

	Range	Accuracy
Air pressure	± 4000 Pascals/± 16 in H_20/± 400 mm H_20/ ± 40 mbar/± 0.6 PSI	± 1 % + 1 Pascal/± 1 % + 0.01 in H_20/ ± 1 % + 0.1 mm H_20/± 1 % + 0.01 mbar/ ± 1 % + 0.0001 PSI
Air velocity	250 fpm to 16,000 fpm (1 to 80 m/s)	± 2.5 % of reading at 2000 fpm (10.00 m/s)
Air flow (volume)	0 to 99,999 cfm; 0 to 99,999 m 3/hr; 0 to 99,999 l/s	Accuracy is a function of velocity and duct size
Temperature	0 °C to 50 °C (32 °F to 122 °F)	0.1 °C (0.1 °F)
Data storage	99 readings	

Fluke RLD2 UV Refrigerant Leak Detector Flashlight

Flashlight that uncovers refrigerant leaks instantly. Laser pointer to find exact leak location.

CO-220 Carbon Monoxide Meter

Check CO levels around furnaces and boilers. Tracks increasing frequency as CO levels rise.

CO-205 Aspirator Kit

A flue gas sampling accessory kit.

Ordering information

Models	Included accessories
FLUKE-975V AirMeter™ with Velocity	Calibration cap, air velocity probe (Fluke 975V only), FlukeView® Forms software, power adapter, international power plugs, hard carrying case, three AA alkaline batteries, users manual with safety information
FLUKE-975 AirMeter™	
FLUKE-922 Airflow Meter	Two rubber hoses, soft carrying case, four AA alkaline batteries 1.5 V, users manual
FLUKE-922/Kit Airflow Meter Kit	12 inch pitot tube, two rubber hoses, magnetic hanging strap, four AA alkaline batteries, users manual, hard carrying case
FLUKE-RLD2 Refrigerant Leak Detector Flashlight	
FLUKE-CO-220 Carbon Monoxide Meter	
FLUKE-CO-205 Aspirator Kit	

FLUKE®

Insulation Testers

Fluke 1587 FC/1577 Insulation Multimeters

The High-Performance 2-in-1 Insulation DMM

The Fluke 1587 FC and 1577 Insulation Multimeters combine a digital insulation tester with a full-featured, true-rms digital multimeter in a single compact, handheld unit, which provides maximum versatility for both troubleshooting and preventive maintenance.

The Fluke 1587 FC Insulation Multimeter adds four powerful new diagnostic functions through the Fluke Connect® Measurements app:

- PI/DAR timed ratio tests with TrendIt™ graphs identifies moisture and contaminated insulation problems faster
- Memory storage through Fluke Connect eliminates writing down results, reduces errors and saves data for historical tracking over time
- Temperature Compensation through app for establishing accurate baselines and relevant historical comparisons
- Historical tracking and trending of assets identifies degradation over time, allows real-time decisions to be made in the field with Fluke Connect® Assets (sold separately)

Specifications

	1587 FC	1577
PI/DAR timed ratio measurements with TrendIt™ graphs through Fluke Connect Measurements app	•	
Memory storage through Fluke Connect Measurements app	•	
Temperature Compensation through Fluke Connect Measurements app	•	
Insulation test voltages 50 V, 100 V, 250 V, 500 V, 1000 V	•	
Insulation test voltages 500 V, 1000 V		•
Insulation resistance	0.01 MΩ to 2.0 GΩ	0.1 MΩ to 600 MΩ
Auto-discharge of capacitive voltage	•	•
Insulation test smoothing reading	•	
Frequency	•	
Capacitance	•	
Diode test	•	
Temperature	•	
Min/Max	•	
VFD low-pass filter for accurate motor drive measurements	•	
AC/DC voltage	•	•
DC millivolts	•	•
AC/DC milliamps	•	•
Resistance	0.1 Ω to 50 MΩ	0.1 Ω to 50 MΩ
Continuity	•	•
Auto power off	•	•
Warranty (years)	3	3

Troubleshooting efficiency and maximum versatility while testing motors and VSDs accurately with Low-Pass filter.

Ordering information

Models	Included accessories
FLUKE-1587 FC Insulation Multimeter	Remote probe, test leads, alligator clips, K-type thermocouple, hard case, users documentation
FLUKE-1577 Insulation Multimeter	Remote probe, test leads, alligator clips, hard case, users documentation

Kits—buy more, save more

Fluke 1587 KIT/62MAX+ FC Advanced Electrical Troubleshooting Kit

Fluke 1587/MDT FC Advanced Motor and Drive Troubleshooting Kit

Recommended accessories

TLK289 Industrial Master Test Lead Set

i400 AC Current Clamp

***Fluke Connect (FC) system is not available in all countries. Non-FC models are available. Check with your local authorized Fluke distributers for more info.**

Fluke 1507 and 1503 Insulation Resistance Testers

The quality, durability, and convenience you need

These lightweight, affordable insulation testers are perfect for troubleshooting, commissioning and preventive maintenance applications.

- Automatic calculation of polarization index and dielectric absorption ratio (1507 only)
- Multiple test voltages: 50 V, 100 V, 250 V, 500 V, 1000 V (1507 only)
- Remote test probe for rapid testing
- Insulation test range 0.01 MΩ to 10 GΩ (1507), 0.1 MΩ to 2 GΩ (1503)
- Compare (Pass/Fail) function for repetitive tests (1507 only)
- Live circuit detection prevents insulation test if voltage > 30 V is detected
- Auto-discharge of capacitive voltage
- AC/DC voltage: 0.1 V to 600 V
- Lo ohms/Earth-bond continuity (200 mA) for checking connections and motor windings
- Resistance: 0.01 Ω to 20.00 kΩ

Specifications

	1507	1503
Insulation test voltages 50 V, 100 V, 250 V, 500 V, 1000 V	•	
Insulation test voltages 500 V, 1000 V		•
Insulation resistance	0.01 MΩ to 10 GΩ	0.1 MΩ to 2 GΩ
Auto-discharge of capacitive voltage	•	•
Continuity function	200 mA acc. EN 61557-4	
Resistance	0.1 Ω to 20.00 kΩ	0.1 Ω to 20.00 kΩ
Auto power off	•	•
Warranty (years)	1	1

Ordering information

Models	Included accessories
FLUKE-1507 Insulation Tester	Remote probe, silicone test leads, test probes, large alligator clips, holster, users manual
FLUKE-1503 Insulation Tester	Remote probe, silicone test leads, test probes, large alligator clips, holster, users manual

Recommended accessories

TLK289 Industrial Master Test Lead Set

TL27 Heavy Duty Test Lead Set

C116 Soft Carrying Case

C101 Hard Case

Magnetic Meter Hanger frees up both hands to focus on making measurements safely.

Check connections and motor windings with Lo ohms/earth-bond continuity test.

Fluke 1555 and 1550C Insulation Resistance Testers

Powerful troubleshooting and predictive maintenance tools

The Fluke 1555 and Fluke 1550C Insulation Resistance Testers offer digital insulation testing up to 10 kV, making them ideal for testing a wide range of high voltage equipment including switchgear, motors, generators and cables.

- Test voltages up to 5 kV (1550C) and 10 kV (1555) provide solutions for all applications
- Warning function alerts the user that line voltage is present and gives a voltage reading up to 600 V ac or dc for increased user safety
- Measurements can be stored in up to 99 memory locations, and each location is assigned a unique, user-defined label for easy recall
- Automatic calculation of Dielectric Absorption (DAR) and Polarization Index (PI) with no additional setup
- Guard system eliminates the effect of surface leakage current on high-resistance measurements
- Capacitance and leakage current measurement
- Ramp function for breakdown testing

Selection guide

	1555	1550C
Insulation test voltages: User selectable 250 V to 5000 V		•
Insulation test voltages: User selectable 250 V to 10,000 V	•	
Insulation resistance	2 TΩ	1 TΩ
Auto-discharge of capacitive voltage	•	•
Warranty (years)	3	3

Specifications

Test voltage (dc)	Range	
250 V	< 250 kΩ 250 kΩ to 5 GΩ 5 GΩ to 50 GΩ > 50 GΩ	unspecified 5 % 20 % unspecified
500 V	< 500 kΩ 500 KΩ to 10 GΩ 10 GΩ to 100 GΩ > 100 GΩ	unspecified 5 % 20 % unspecified
1000 V	< 1 MΩ 1 MΩ to 20 GΩ 20 GΩ to 200 GΩ > 200 GΩ	unspecified 5 % 20 % unspecified
2500 V	< 2.5 MΩ 2.5 MΩ to 50 GΩ 50 GΩ to 500 GΩ > 500 GΩ	unspecified 5 % 20 % unspecified
5000 V	< 5 MΩ 5 MΩ to 100 GΩ 100 GΩ to 1 TΩ > 1 TΩ	unspecified 5 % 20 % unspecified
10000 V (1555 only)	< 10 MΩ 10 MΩ to 200 GΩ 200 GΩ to 2 TΩ > 2 TΩ	unspecified 5 % 20 % unspecified
Functions		
Leakage current	1 nA to 2 mA	± (20 % + 2 nA)
Capacitance measurement	0.01 uF to 20.00 µF	± (15 % rdg + 0.03 µF)
Live circuit indicator	30 V to 1100 V ac/dc, 50/60 Hz	±(15 % + 2 V)

Flexibility for testing wide range of high voltage applications.

Ordering information

Models	Included accessories
FLUKE-1550C 5kV Insulation Tester **FLUKE-1555** 10 kV Insulation Tester	Test leads with alligator clips, infrared adapter with interface cable, FLUKEView Forms software, ac power cord, soft carrying case, quick reference guide, user manual
FLUKE-1550C KIT **FLUKE-1555 KIT**	Test leads with ruggedized alligator clips, infrared adapter with interface cable, FlukeView Forms software, AC power cord, hard carrying case, quick reference guide, users manual, NIST traceable certificate

Intrinsically Safe Products

Intrinsically Safe Products

There are no global intrinsically safe standards or certifications, but there are organizations that influence directives in certain world geographies.

FM APPROVED

Factory Mutual

In the United States, Factory Mutual Research, managed by Factory Mutual (FM) Global, is a non-profit scientific and testing organization that has tested and certified over 40,000 products in the last 165 years. FM Research has set certification guidelines for equipment used in potentially explosive atmospheres.

C SP US

Canadian Standards Association (CSA)

Accreditation body for North American regulations, based in Toronto, Canada.

ATEX

The primary intrinsically safe standard, which has been set in the European Union with the Directive 2014/34/EU (replacing the 94/9/EC), and commonly called ATEX 114 (Atmosphères Explosibles), French for explosive atmospheres.

ETL US

ETL

Accreditation body for North American regulations, NEC-500/NEC-505.

Fluke products designed to intrinsic safety standards

A protection method employed in potentially explosive atmospheres, intrinsically safe devices are designed to be unable to release sufficient energy, by either thermal or electrical means, to cause ignition of flammable material (gas or dust/particulates).

Fluke products	ATEX certified	North American Certification
28 II Ex: Intrinsically Safe True-rms Multimeter	II 2G Ex ia IIC T4 Gb II 2D Ex ia IIIC T130 °C Db I M1 Ex ia I Ma	Class I Zone 1 AEx ia IIC T4 Class II Zone 21 AEx iaD T130C **USA and Canada** Class 1 Div 1 Groups ABCD Class 1 Div 2 Groups ABCD Class 2 Div 1 Groups EFG Class III Ex ia IIC
707Ex: Intrinsically Safe mA Calibrator	II 2 G Ex ia IIC T4	C SP US 221839 Class I, Div 2, Groups A-D
718Ex: Intrinsically Safe Pressure Calibrator	II 1 G Ex ia IIC T4	C SP US LR 110460 I.S. Class I, Div 1, Groups A-D T4
721Ex: Intrinsically Safe Precision Pressure Calibrator	ATEX: II 2G Ex ia IIB T3 Gb	C SP US 221839 IECEx II 2 G
725Ex: Intrinsically Safe Multifunction Calibrator	II 1 G Ex ia IIB 171 °C	C SP US LR 110460 I.S. Class I, Div 1, Groups B-D, 171 °C
750PEx: Intrinsically Safe Pressure Module	ATEX: II 1 G Ex ia IIC T4 Ga	C SP US 221839 IECEx: Ex ia IIC T4 Ga
568Ex: Intrinsically Safe Infrared Thermometer	ATEX/IECEx Zone 1 and 2	C SP US NEC-500/NEC-505 Class I Division 1 and 2
700G Series Intrinsically Safe Pressure Gauges	II 3 G Ex ia IIB T6	C SP US LR 110460 CSA Class I, Div. 2 Groups A-D rating
1551A/1552A: Intrinsically Safe "Stik" Thermometer	ATEX/IECEx Zone 1 and 2	C SP US NEC-500/NEC-505 Class I Division 1 and 2

Ordering information

Models
FLUKE-28 II Ex IS True-rms Multimeter
FLUKE-568 Ex Intrinsically Safe Infrared Thermometer
FLUKE-700G Pressure test Gauge, 23 pressure ranges from 0 to 10 inH20 up to 10,000 psi
FLUKE-750PEx Intrinsically Safe Pressure Module
FLUKE-707Ex IS Loop Calibrator
FLUKE-718Ex IS Pressure Calibrator
FLUKE-721Ex Precision Pressure Calibrator
FLUKE-725Ex IS Multifuction Process Calibrator
FLUKE-1551A Ex "Stik" Thermometer –50 °C to 160 °C (-58 °F to 320 °F)
FLUKE-1552A Ex "Stik" Thermometer -80 °C to 300 °C (-112 °F to 572 °F)

Infrared Cameras

8 REASONS
TO CHOOSE FLUKE INFRARED CAMERAS

Superior image quality

Fluke maximises the performance of every pixel with industry leading spatial resolution to give you crisp detailed images and more accurate measurements, even when you have to take them from further distances. Patented IR-Fusion® technology with AutoBlend™ mode produces a transparent infrared and visible light image that shows brilliant detail and pinpoints the exact location of the problem making your job easier.

Fluke Connect® Tools

The largest system of connected test tools in the world. The Fluke Connect® app and connectable tools are the most comprehensive way to stay in contact with your team without leaving the field. With over 40 connectable tools, confidently diagnosing, solving and communicating problems has never been easier. See it. Save It. Share It. All the facts, right in the field.

Fluke Connect® App

With the Fluke Connect® app and enabled tools, you can collaborate with others no matter where they are. See what your team is seeing, and vice versa. Share and watch live video and readings to troubleshoot problems from any location. In addition save yourself the time and effort of going to the plant floor or back to the office every time there's a question or issue.

Best-in-class focus systems

Every infrared camera user knows that focus is the single most important aspect when conducting an infrared inspection. Without an in-focus image, temperature measurements may be off by as much as 20 degrees, making it easier to miss a problem. That's why Fluke engineered the only infrared cameras on the market with LaserSharp® Auto Focus—instantly capture an in-focus image with the touch of a button for consistently in-focus images. EVERY. SINGLE. TIME. Another option gives you optimum focus flexibility with the IR-OptiFlex™ Focus System which combines focus free ease-of-use with manual focus.

Customer driven design

Our design team is on the job, in the factory and out in the field for countless hours with our customers to continually deliver better products based around your applications and how you work. The resulting intelligent 3 button menu design allows you to operate our simple, intuitive on-screen menu interface- even while wearing gloves. We pay attention to even the smallest details providing you with an LED charge indicator on your battery insuring you don't unexpectedly lose power and offering replaceable SD cards so you don't have to delete your work to add to it. Not only can you operate a Fluke infrared camera with one hand behind your back, but you may never have to open the operating manual either.

Legendary ruggedness

We test our cameras to exceed specifications, so we drop them, soak them, shock them, and shake them for hours on end. Our tools are relentless, built tough to withstand the harsh environments where you work, for years to come.

Reputation for quality

Fluke is well known for designing and building "Best in Class," top quality products. With over 65 years of experience and a line of award winning products, such as Product of the Year from Plant Engineering and the 2013 Engineering Choice Award from Control Engineering, we continue to maintain our long time reputation and commitment to quality.

Dedicated Training

Learn how to use a Fluke thermal camera to reach your full business potential. If you are interested in improving your skills, knowledge or business, we offer seminars, webinars and product training. Learn how to get started, what to do, understanding what the results mean, and then being able to identify the best solutions.

Performance Series

What?

Fluke TiS75, TiS65, TiS60, TiS55, TiS50, TiS45, TiS40, TiS20, TiS10 Infrared Cameras

Who?

Technicians and Contractors

Where?

The widest range of Maintenance Applications including:

- Electrical, Mechanical
- HVAC
- Building Diagnostics
- Domestic/Commercial/Industrial Facilities

Why?

Affordable and feature-rich cameras producing quality images, with easy operation for quick scans and/or intermittent inspections.

With IR-OptiFlex™ IR-Fusion® with AutoBlend™, Fluke Connect® and SmartView® software.

Professional Series

What?

Fluke Ti480 PRO, Ti450 PRO, Ti400 PRO, Ti300 PRO Infrared Cameras

Who?

Professional In-house, Contract and Service Thermographers

Where?

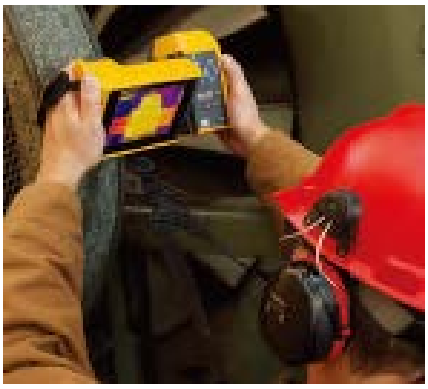
Industrial and Commercial Areas:

- Industrial Maintenance
- Heavy Commercial Facility Maintenance
- Oil and Gas Maintenance
- Reliability Inspections

Why?

High quality images and advanced features like SuperResolution, LaserSharp™ Auto Focus & MultiSharp™ mode. Consistently in-focus images, on multiple objects near to far.

IR-Fusion® with AutoBlend™, Fluke Connect® and SmartView® software. Rugged. Easy-to-use touch screen.



Expert Series

What?

Fluke TiX1000, TiX660, TiX640, TiX580, TiX560, TiX520, TiX500 Infrared Cameras

Who?

Engineers, Researchers, Designers and Advanced Thermographers

Where?

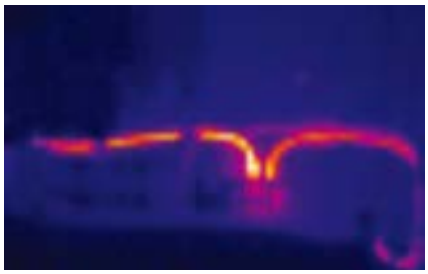
R&D, Quality Control and Predictive Maintenance, particularly for demanding sectors like:

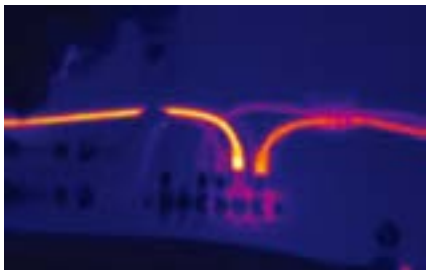
- Industrial
- Oil and Gas
- Utilities (Generation
- Transmission, Distribution)
- Electrical, Mechanical
- Medical, Biological/Sciences

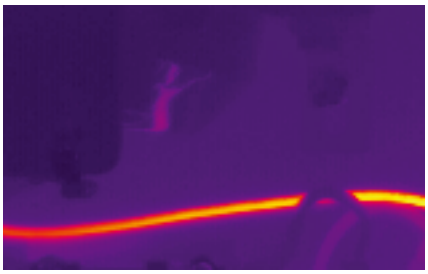
Why?

Needle-sharp resolution on an extra-large 5.6 inch articulating colour TFTLCD display with daylight operation. Field swappable lenses extend applications. HD quality images give greater impact in reports. Integral camcorder.

With IR-OptiFlex™ IR-Fusion® with AutoBlend™, Fluke Connect® and SmartView® software.







Selection guide

	Expert Series					Professional Series			
	TiX1000	**TiX660**	**TiX580**	**TiX560**	**TiX520**	**Ti480 PRO**	**Ti450 PRO**	**Ti400 PRO**	**Ti300 PRO**
Detector resolution	1024 x 769, 2048 x 1536 Super Res.	640 x 480, 1280 x 960 Super Res.	640 x 480, 1280 x 960 Super Res.	320 x 240 Super Resolution mode: 640 x 480		640 x 480, 1280 x 960 Super Res	320 x 240 Super Resolution mode: 640 x 480	320 x 240	240 x 180
Field of view	32.4° H x 24.7° V	30.9 °H x 23.1 °V	34 °H x 24 °V	24 °H x 17 °V		34°H X 24°V	24 °H x 17 °V		
Optional lenses	Capture spectacular images close up or from a distance with: 2 wide angle, 2 telephoto, 3 macro and 1 standard		Capture spectacular images close up or from a distance with pre-calibrated smart lenses: wide angle, 2x and 4x telephoto, 25 micron macro						
Wireless connectivity[1]	-		Fluke Connect® app compatible. Wireless connectivity to PC, iPhone® and iPad® (iOS 4s and later), Android™ 4.3 and up, and WiFi and LAN[1]						
Focus system	LaserSharp® Auto Focus, autofocus, manual focus and EverSharp multifocal recording		MultiSharp™ Focus, LaserSharp® Auto Focus with built-in laser distance meter and advanced manual focus					LaserSharp® with built-in laser distance meter and advanced manual focus	
IR-Fusion® technology/ visible context	IR-Fusion® AutoBlend™ mode and Picture-in-Picture, continuous blending		IR-Fusion® AutoBlend™ mode and Picture-in-Picture, continuous blending		IR-Fusion® AutoBlend™ mode and Picture-in-Picture				
Display	5.6 inch color TFT display, 1280 x 800 pixel resolution, suitable for daylight operation		5.7 inch touch screen LCD, 640 x 480 pixel resolution			3.5 inch touch screen LCD, 640 x 480 pixel resolution			
Design	Camcorder with handle, tiltable LCoS color viewfinder display, 800 x 600 pixel resolution		Ergonomic FlexCam design with a 240 degree rotating lens			Rugged, ergonomic design for one-handed use			
Thermal sensitivity	≤ 0.05 °C at 30 °C target temp (50 mK)	≤ 0.03 °C at 30 °C target temp (30 mK)	≤ 0.05 °C at 30 °C target temp (50 mK)	≤ 0.03 °C at 30 °C target temp (30 mK)	≤ 0.04 °C at 30 °C target temp (40 mK)	≤ 0.05 °C at 30 °C target temp (50 mK)	≤ 0.025 °C at 30 °C target temp (25 mK)	≤ 0.04 °C at 30 °C target temp (40 mK)	≤ 0.04 °C at 30 °C target temp (40 mK)
Temperature measurement range	-40°C to +1200 °C (-4 °F to 2192 °F) High temperature option-request at time of order: up to 2000°C (3632°F)		-20 °C to +800 °C (-4 °F to + 1472 °F)	-20 °C to +1200 °C (-4 °F to +2192 °F)	-20 °C to +850 °C (-4 °F to +1562 °F)	-10 °C to +1000 °C (-14 °F to 1832 °F)	-10 °C to 1500 °C (14 °F to 2732 °F)	-20 °C to +1200 °C (-4 °F to +2192 °F)	-20 °C to +650 °C (-4 °F to +1202 °F)
Frame rate	9Hz or 30Hz	9Hz & 60Hz							
Software	SmartView® software and Fluke Connect®[1]								
Documentation features	Voice annotation and Text annotation		IR-PhotoNotes™, voice annotation, and text annotation						
Video recording	Standard and radiometric								
Streaming video (remote display)	Via HDMI; GigE Ethernet available in SmartView® software		Via USB or WiFi hot spot to PC or via HDMI to HDMI compatible screen						
Remote control	-		Yes, through SmartView® software or Fluke Connection® mobile app		-	Yes, through SmartView® software or Fluke Connection® mobile app			-
Alarms	High temperature, low temperature, time lapse - auto image capture, and isotherms (within range)								

[1]Within your provider's wireless service area; Fluke Connect is not available in all countries.

	Performance Series IR Cameras					
	TiS75	**TiS65/TiS60**	**TiS55/TiS50**	**TiS45/TiS40**	**TiS20**	**TiS10**
Detector resolution	320 x 240	260 x 195	220 x 165	160 x 120	120 x 90	80 x 60
Field of view	35.7 °H x 26.8 °V					
Optional lenses	–					
Wireless connectivity[1]	Fluke Connect® app compatible. Wireless connectivity to PC, iPhone® and iPad® (iOS 4s and later), Android™ 4.3 and up, and WiFi to LAN					
Focus system	Manual focus	TiS65 (Manual focus) TiS60 (Fixed focus)	TiS55 (Manual focus) TiS50 (Fixed focus)	TiS45 (Manual focus) TiS40 (Fixed focus)	Fixed focus	
IR-Fusion® technology/ visible context	5 presets (0 %, 25 %, 50 %, 75 %, 100 %)				3 presets (0 %, 50 %, 100 %)	–
Display	3.5 inch (landscape) 320 x 240 LCD					
Design	Rugged, lightweight, ergonomic design for one-handed use					
Thermal sensitivity	≤ 0.08 °C at 30 °C target temp (80 mK)			≤ 0.09 °C at 30 °C target temp (90 mK)	≤ 0.10 °C at 30 °C target temp (100 mK)	≤ 0.15 °C at 30 °C target temp (150 mK)
Temperature measurement range	-20 °C to +550 °C (–4 °F to 1022 °F)		-20 °C to +450 °C (–4 °F to 842 °F)	-20 °C to +350 °C (–4 °F to 662 °F)		-20 °C to +250 °C (–4 °F to 482 °F)
Frame rate	30 Hz or 9 Hz	TiS65 (30 Hz or 9 Hz) TiS60 (9 Hz)	TiS55 (30 Hz or 9 Hz) TiS50 (9 Hz)	TiS45 (30 Hz or 9 Hz) TiS40 (9 Hz)	9 Hz	
Software	SmartView® software and Fluke Connect®[1]					
Documentation features	IR-PhotoNotes™ (3 images), voice annotation		IR-PhotoNotes™ (1 image), voice annotation	Voice annotation	–	
Video recording	Standard and radiometric		–			
Streaming video (remote display)	Yes, to SmartView® software on a PC or to the Fluke Connect® app on a smartphone		–			
Remote control	–					
Alarms	High temperature, low temperature, time lapse – auto image capture, and isotherms (within range)			High temperature, low temperature, time lapse – auto image capture	–	

[1]Within your provider's wireless service area; Fluke Connect is not available in all countries.

Fluke Expert Series: TiX1000/660/640 and TiX580/560/520/500

TiX1000/660/640

TiX580/560/520/500

Stunning HD and industry´s largest screen

See incredible detail in your target with SuperResolution and up to 3.1 million pixels. Navigate over, under and around hard-to-reach objects with a full 240 degree rotating lens. Easily view, annotate, edit and analyze images on the large tablet-like screen. Get advanced analytics such as streaming IR data and trend analysis.

- Easily navigate over, under and around objects with the 240° articulating lens (TiX580/560/520/500) or the articulating LCD display (TiX1000/660/640)
- MultiSharp™ Focus (TiX580/560/520/500) and EverSharp multifocal recording (TiX1000/660/640) give you clear, accurate focus throughout the field of view in one image, by capturing multiple images from varying focal distances
- LaserSharp® Auto Focus gives you the fastest way to precisely focused images by calculating the distance to your target with a laser distance meter[1]
- Capture spectacular images close up or from a distance with seven optional lenses including telephoto, wide angle, and macro (TiX1000/660/640) or interchangeable smart lenses—2x and 4x telephoto, wide angle, and 25 micron macro (TiX580/560/520/500)
- Get premium in-field viewing with the 5.7 inch touchscreen LCD, the largest in its class (TiX580/560/520/500) or the 5.6 inch articulating display (TiX1000/660/640) along with a viewfinder that reduces outdoor glare (TiX1000/660)

[1]Compared to industrial infrared cameras without a user-designated laser-focus feature.

Ordering information

Models	Included accessories
FLUKE-TiX1000 9Hz or 30Hz Infrared Camera; 1024 x 768	Rechargeable battery (2 for TiX1000 and TiX660; 1 for TiX640), battery charger and adapter, ac adapter, SD card reader, FC SD card for Fluke Connect, protective lens cap, hand strap, neck strap, carrying case, warranty card, safety instructions, calibration certificate, printed manual in English and Chinese, multi-lingual manual CD, SmartView® software
FLUKE-TiX660 9Hz or 60Hz Infrared Camera; 640 x 480	
FLUKE-TiX640 9Hz or 60Hz Infrared Camera; 640 x 480	
NEW **FLUKE-TiX580** 9Hz or 60Hz Infrared Camera; 640 x 480	AC power supply; battery pack charger (including universal AC adapters); two rugged lithium ion smart battery pack; USB cable; HDMI video cable; micro SD card; rugged, hard carrying case; adjustable neck and hand straps and quick start guide; Bluetooth headset (where available)
FLUKE-TiX560 9Hz or 60Hz Infrared Camera; 320 x 240	
FLUKE-TiX520 9Hz or 60Hz Infrared Camera; 320 x 240	
FLUKE-TiX500 9Hz or 60Hz Infrared Camera; 320 x 240	

Lens compatibility

Models	Lenses
TiX1000/660/640	FLK-XLENS/TELE; FLK-XLENS/SUPTELE; FLK-XLENS/WIDE; FLX-XLENS/SUPWIDE; FLX-XLENS/MACRO1; FLK-XLENS/MACRO2; FLK-XLENS/MACRO3
TiX580/560/520/500	FLK-LENS/TELE2; FLK-LENS/4XTELE2; FLK-LENS/WIDE2; FLK-LENS/25MAC2

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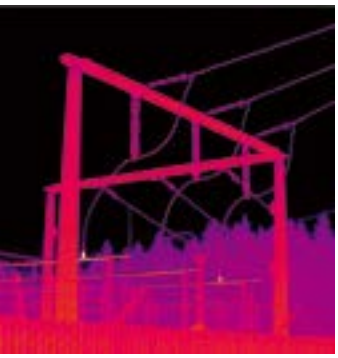
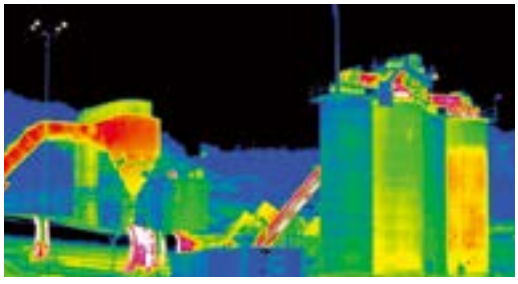
Apparent hot spots in electrical equipment.



Get tough shots from any angle with a 240° degree rotating lens and the only 5.7 inch LCD in its class (TiX580/560/520/500).



Fluke Professional Series: Ti480 PRO/450 PRO/400 PRO/300 PRO

FLUKE CONNECT™

100 % Focused. Every object.

Get clear, accurate focus on objects near and far with MultiSharp™ focus, or focus with laser speed and accuracy on your designated target with LaserSharp® Auto Focus. Easily navigate the menu and view images on a 3.5 inch, 640 x 480 touchscreen.

- Leading-edge visual infrared experience in Ti480 PRO 640 x 480 thermal imager and Ti450 PRO 320 x 240 thermal imager.
- Get 4x the pixel data with SuperResolution, which captures multiple images and combines them to create a 1280 x 960 image (Ti480 PRO) or a 640 x 480 image (Ti450 PRO)
- Inspect high-temperature components, up to 1500 °C (2732 °F)[1]
- Digitally document critical information with your infrared image using IR-PhotoNotes™, voice annotation, or text annotation
- Monitor processes with video recording, live video streaming, remote control[1], or auto capture

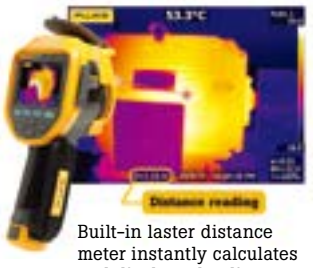
[1]Features vary by model.

Ordering information

Models	Included accessories
NEW **FLUKE-Ti480** PRO 9Hz or 60Hz Infrared Camera	Infrared camera with standard infrared lens; ac power supply and battery pack charger (including universal ac adapters); two rugged lithium ion smart battery packs; USB cable; HDMI video cable; 4GB micro SD card; rugged, hard carrying case; soft transport bag and adjustable hand strap and quick start guide
NEW **FLUKE-Ti450** PRO 9Hz or 60Hz Infrared Camera	
FLUKE-Ti400 PRO 9Hz or 60Hz Infrared Camera	
FLUKE-Ti300 PRO 9Hz or 60Hz Infrared Camera	

Lens compatibility

Models	Lenses
Ti480 PRO/450 PRO/400 PRO/300 PRO	FLK-LENS/TELE2; FLK-LENS/4XTELE2; FLK-LENS/WIDE2



Built-in laser distance meter instantly calculates and displays the distance to your target.

Expand the capabilities of your infrared camera

Software for Fluke Infrared Cameras

Analyze images, adjust blending and palette, export to multiple file formats, and create professional reports with Fluke SmartView® desktop software, downloadable for free from the Fluke website, or the Fluke Connect® mobile app for your smartphone. The Fluke Connect® app also enables you to wirelessly sync images directly from your camera to your smartphone, where you can email images to colleagues and attach them to an asset record or work order.

Lenses and other accessories

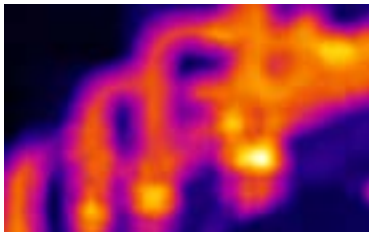
Capture images close up or from a distance with optional lenses, available for the Expert and Professional Series cameras.

All Fluke Professional and Performance Series cameras feature interchangeable batteries. Expand your powering capabilities with a car charger, extra battery, or charging base.

Save time and instantly email images from the field with the Fluke Connect® app.

100% Focused–Every object. MultiSharp™

Go from being completely out of focus to:



100 % in focus with MultiSharp™ Focus, available on the Ti450 PRO.

***Fluke Connect (FC) system is not available in all countries. Non-FC models are available. Check with your local authorized Fluke distributers for more info.**

Fluke Performance Series: TiS75/65/60/55/50/45/40/20/10

Easy-to-use frontline troubleshooting

Easily see potential problems with precisely blended IR and visual images–with a 5MP visual camera, up to 320 x 240 resolution, and a large 3.5 inch LCD. Get precise focus as close as 15 cm (6 in) with manual focus.

- With up to 320 x 240 resolution, you can see more detail in every image, even from a distance—detail that could indicate a potential issue
- Get the context of the visual and infrared details all in one precisely blended or picture-in-picture image with IR-Fusion® technology[1]
- Reduce the amount of time it takes to get an in focus image with manual or fixed focus options
- Make decisions in real time—wirelessly sync images from your camera, create and email reports all with your smart phone and the Fluke Connect® App.
- Wirelessly connect to other Fluke Connect tools and pull in other measurements types like electrical and vibration into your thermal image.
- Removable 4GB micro SD card
- Digitally document critical information with your infrared image using IR-PhotoNotes™ or voice annotation[3]
- Monitor battery charge and avoid unexpected loss of power with the smart battery with LED charge indicator

[1]IR-Fusion® and picture-in-picture mode execution varies by model

[2]Within your provider's wireless service area; Fluke Connect® is not available in all countries. Subscription to Fluke Connect® Assets is required in order to use the asset management and work order function

[3]Varies by model; see page 73 for model specifications

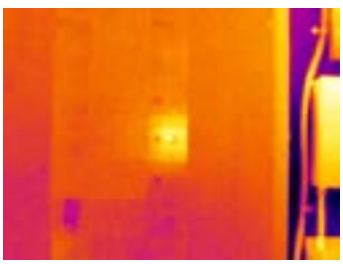
Ordering information

Models	Included accessories
FLUKE-TiS75 30HZ Industrial Commercial Infrared Camera	Universal AC power adapter, lithium ion smart battery (TiS75, TiS65/60 includes 2 each—other models 1 each), USB cable, Micro SD card (TiS75, TiS65/60, TiS55/TiS50, TiS45), hard carrying case (TiS75, TiS65/60, TiS55/50, TiS45/40), soft transport bag, adjustable hand strap (TiS75, TiS65/60, TiS55/50, TiS45/40) and quick start guide. TiS75, TiS65/60 models include a two-bay battery charger.
FLUKE-TiS75 9HZ Industrial Commercial Infrared Camera	
FLUKE-TiS65 30HZ Industrial Commercial Infrared Camera	
FLUKE-TiS65 9HZ Industrial Commercial Infrared Camera	
FLUKE-TiS60 9HZ Industrial Commercial Infrared Camera	
FLUKE-TiS55 30HZ Industrial Commercial Infrared Camera	
FLUKE-TiS55 9HZ Industrial Commercial Infrared Camera	
FLUKE-TiS50 9HZ Industrial Commercial Infrared Camera	
FLUKE-TiS45 30HZ Industrial Commercial Infrared Camera	
FLUKE-TiS45 9HZ Industrial Commercial Infrared Camera	
FLUKE-TiS40 9HZ Industrial Commercial Infrared Camera	
FLUKE-TiS20 9HZ Industrial Commercial Infrared Camera	
FLUKE-TiS10 9HZ Industrial Commercial Infrared Camera	

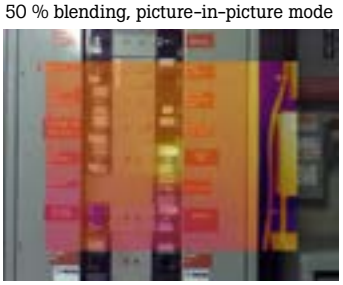
Inspect industrial components.

Designed for your environment.

Full infrared.



50 % blending, picture-in-picture mode



Picture-in-Picture.

***Fluke Connect (FC) system is not available in all countries. Non-FC models are available. Check with your local authorized Fluke distributers for more info.**

FLUKE®

Laser Levels

Fluke Laser Levels

Rugged, precision tools for efficient layout

Fluke laser levels are built with the ruggedness you'd expect from every Fluke tool. Designed and tested to survive a one meter drop, you can rely on your Fluke laser level every time you reach for it.

These professional-grade tools also provide the precision you expect from Fluke. Fluke 3-point laser levels are accurate to 6 mm at 30 meters (1/4 inch at 100 feet), and Fluke continuous line lasers levels are accurate to 3 mm at 10 meters (1/8 inch at 30 feet). The fast settling, self-leveling gimbal gives you accurate reference points and lines almost instantly: long and tedious layouts will become a thing of past.

Product overview

All laser level models.Rugged design withstands rough handling on the job site; drop tested at 1 meter Includes magnetic wall bracket for easy, stable mounting

Fluke 3PR and Fluke 3PG

- Self-leveling 3 point laser level allows for fast, accurate layout of reference points
- Accurate to 6 mm at 30 meters (1/4 inch at 100 feet)
- Includes floor stand for fast, easy overhang and centerline measurements
- Green laser is up to 3 times brighter for improved visibility and long range applications (Fluke-3PG only)

Fluke 180LR and Fluke 180LG

- Self-leveling, horizontal- and vertical-cross line laser level for rapid, accurate leveling and layout
- Accurate to 3 mm at 10 meters (1/8 inch at 30 feet)
- Green laser for improved visibility. Up to 3 times brighter, and suited for long range applications (Fluke-180LG only)

Fluke LDR and Fluke LDG Laser Line Detectors

- Laser line detector for use in high ambient light settings
- Visual and audible indicators for ease of use; Rugged design
- Compatible with Fluke-180LR (Fluke-LDR) or Fluke-180LG (Fluke-LDG)
- Includes mounting bracket for quick, steady positioning

Fluke 180LR and Fluke 180LG Laser Level Systems

- Self-leveling, horizontal- and vertical-cross line laser level
- Includes laser line detector and detector bracket for use in high ambient light settings

Specifications

		3PR, 3PG	180LR, 180LG	LDR, LDG
Light source		Semiconductor laser diode		-
Leveling range		≤6 °		-
Leveling		Automatic		
Working range		≤30 m	≤60 m	≤60 m
Detection height		-	-	≤50 mm
Accuracy		≤6 mm @ 30 m	≤3 mm @ 9 m	Fine: 0.75 mm Medium: 1.75 mm
Batteries		3 x AA Alkaline IEC LR6		1 x 9 V Alkaline IEC LR61
Battery life	**Red**	≥30 hrs, continuous use	≥35 hrs, continuous use with single beam	≥30 hrs, continuous use
	Green	10 hrs to 12 hrs, continuous use	2 hrs to 6 hrs, continuous use with single beam	
Dimensions (H x W x L)		140 mm x 102 mm x 57 mm	93 mm x 61 mm x 93 mm	94 mm x 94 mm x 42 mm
Weight (with batteries)		0.52 kg	0.50 kg	0.20 kg
Warranty		3 years		
Laser		IEC 60825-1: Class 3R		
Max output power		<5 mW		-
Wavelength		Red: 635 nm Green: 510 nm		

Ordering information

Models	
FLUKE-3PR Red 3-point laser level, carrying pouch, wall bracket, floor stand	FLUKE-3PG Green 3-point laser level, carrying pouch, wall bracket, floor stand
FLUKE-180LR Red 2-line laser level, carrying pouch, wall bracket	FLUKE-180LG Green 2-line laser level, carrying pouch, wall bracket
FLUKE-180LR SYSTEM Red 2-line laser level, carrying case, wall bracket, red laser detector, rod clamp	FLUKE-180LG SYSTEM Green 2-line laser level, carrying case, wall bracket, green laser detector, rod clamp
FLUKE-LDR Red laser detector and rod clamp	FLUKE-LDG Green laser detector and rod clamp

FLUKE®

Power Quality Tools

Selection guide

	Three-Phase								
Basic measurements	VR1710	1742	1746	1748	1732	1734	438-II	1750	1760
Energy studies (Get detailed power and energy consumption profiles during energy audits and pinpoint savings opportunities)									
Measure V, I, kW, Cos/DPF, kWhr		•	•	•	•	•	•	•	•
Measure MIN/MAX and AVG values		•	•	•	•	•	•	•	•
10 day logging		•	•	•	•	•	•	•	•
Waste energy monetization							•		
Basic harmonics study (Discover the source of distortion in your installation, so that you can filter those loads or move them to separate circuits)									
THD measurement (V & I)	•	•	•	•	•	•	•	•	•
Harmonics 1 to 25 for V & I	• (V only)		•	•			•	•	•
Advanced harmonics study (If distorting loads are causing problems in your installation, you need comprehensive data to identify the source and create a solution)									
Full harmonic spectrum			•	•			•	•	•
Power harmonics							•	•	•
Basic industrial PQ troubleshooting (When troubleshooting in the field, graphical data enables you to trace the source of the problem at hand)									
Oscilloscope function							•	•	•
Voltage dips and swells	•		•	•	•	•	•	•	•
Advanced industrial PQ troubleshooting (Complex installations often require a deeper dive into measurement data. Multiple loads may be interacting randomly to cause a single problem)									
Comprehensive logging capability		•	•	•	•	•	•	•	•
Transient capture	•	•	•	•			•	•	•
Flicker	•	•	•	•			•	•	•
Motor analysis (Perform dynamic motor analysis by plotting of motor de-rating factor against load according to NEMA/IEC guidelines on direct on-line electric motors)									
Speed							•		
Torque							•		
Mechanical power							•		
Efficiency							•		
Features									
Inrush			•	•			•		
Flicker		•		•			•	•	•
Transients		•	•	•			•	•	•
Mains signaling			•	•			•	•	•
Power wave							•		
Event waveform capture				•			•	•	•
Power inverter efficiency							•		
Communication									
Ethernet		•	•	•				•	•
USB (mini B)	•	•	•	•	•	•	•	•	•
WiFi download Instrument to device		•	•	•	•	•	•	•	•
Wifi download via WiFi hub (requires registration)		Opt	Opt	Opt	Opt	Opt		Opt	Opt

Find how-to videos, application notes and other resources on the power quality and ower and energy loggers product pages on www.fluke.com

Fluke 430-II Series Three-Phase Power Quality and Motor Analyzers

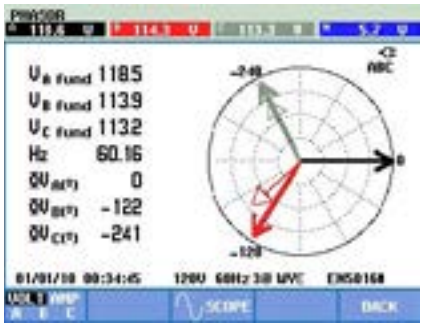
Locate, predict, prevent power quality problems

The Fluke 434-II, 435-II, 437-II and 438-II help troubleshoot power quality problems in three- and single-phase power distribution systems. The Fluke patented energy loss algorithm, Unified Power Measurement, measures, quantifies and monetizes energy losses due to harmonics and unbalance issues, allowing the user to pinpoint the origin of energy waste within a system.

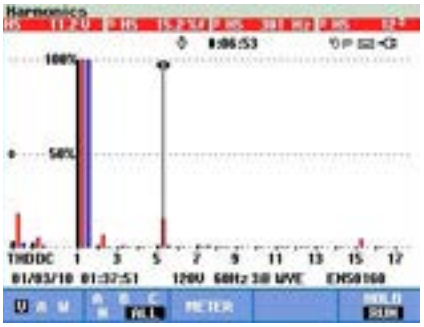
- Capture fast rms data in real time with PowerWave data capture; show single cycle rms value to characterize electrical system dynamics (generator start-ups, UPS switching etc.)
- Measure key parameters on direct-on-line motors including torque, RPM, mechanical power and motor efficiency (438-II)
- CAT IV 600 V/CAT III 1000 V rated for use at the service entrance
- Automatic transient mode; capture 200 kHz waveform data on all phases simultaneously up to 6 kV for 435-II and 437-II
- Conduct tests according to the stringent international IEC 61000-4-30 Class-A standard intervals for 435-II and 437-II
- With included four iFlex flexible current probes, measure all three phases and neutral
- Download data wirelessly with the Fluke Connect® SD Card (not included with the INTL)
- Three-year warranty

Ordering information

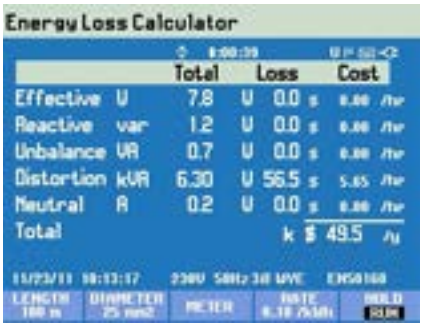
Models	Included accessories
FLUKE-434-II Three-Phase Energy Analyzer **FLUKE-435-II** Three-Phase Power Quality and Energy Analyzer **Fluke-438-II** Three-Phase Power Quality and Motor Analyzer	Four thin flexible current probes, five test leads and clips, battery charger, Power Log software, USB cable, color localization set, soft carrying case, 8GB WiFi SD memory card, users manual on CD
FLUKE-437-II 400 Hz Three-Phase Power Quality and Energy Analyzer	Four thin flexible current probes, five test leads and clips, battery charger, Power Log software, USB cable, color localization set, hard carrying case with wheels, 8GB WiFi SD memory card, users manual on CD



Phasor diagram.



Track haemonics up to the 50th,and measure and recorf THD.



Energy loss calculator.

NEW

Fluke 1742, 1746 and 1748 Three-Phase Power Quality Loggers

Troubleshoot, quantify energy usage and perform quality of service surveys easier than ever

- **Measure all three voltage and current phases plus the neutral current:**
  Three-phase and neutral voltage leads and four flexible current probes.
- **Comprehensive logging:**
  More than 20 separate logging sessions can be stored in the instrument. A comprehensive range of power and power quality variables are automatically logged so you never lose measurement trends.
- **Measure with premium accuracy:**
  Meets the rigorous IEC 61000-4-30 Class A Edition 3 standard for 'Testing and measurement techniques—Power quality measurement methods.
- **Capture dips, swells and interruptions:**
  The 1748 includes event waveform capture and RMS event profile, along with date, timestamp and severity information to help pinpoint potential root causes of power quality issues.
- **Measure key power quality parameters:**
  Measures harmonics and interharmonics for voltage and current, also includes unbalance, flicker and rapid voltage changes.
- **Flexible power supply:**
  Powers directly from the measured circuit with the widest available range for a power quality logger automatically going from 100 V to 500 V or from a wall line cord, so you can test anywhere.
- **Rugged and reliable:**
  Designed to withstand harsh installation environments with IP65 rating when used with IP65 voltage input adapter.
- **Two external USB ports:**
  One for PC connection and another for quick, simple data download to standard USB thumb drives, or other USB devices, allowing you to leave the measurement device in place without disrupting logging.
- **Ethernet connectivity:**
  Wired and wireless connections for instrument setup and high-speed data download.
- **Highest safety rating in the industry:**
  600 V CAT IV/1000 V CAT III rated for use at the service entrance and downstream.
- **Battery life:**
  Four-hour operating time (backup time) per charge on lithium-ion battery to withstand temporary power disruptions.

Take power quality analysis, system planning and demand management to the next level
www.fluke.com/analyzePQ

Ordering information

Model	Description	Included accessories
FLUKE-1742/15/INTL	Power quality logger with 24in/60cm 1,500A iFlex current probes	Flexible current probe (1742/15/INTL and 1742/30/INTL only), USB stick, USB cable, 3PHVL-1730 3-Phase + neutral voltage test lead, test lead set red/black 0.18m, test lead set red/black 1.5m, alligator clips, 173X/174X soft case, cable marker kit, MP1-3R/1B-Magnet Probe 1 set (3 red, 1 black) (optional), 174X-hanger Kit (optional)
FLUKE-1742/30/INTL	Power quality logger with 24in/60cm 3,000A iFlex current probes	
FLUKE-1742/B/INTL	Power quality logger without iFlex current probes	
FLUKE-1746/15/INTL	Power quality logger with 24in/60cm 1,500A iFlex current probes, international version	Flexible current probe (1746/15/INTL and 1746/30/INTL only), USB stick, USB cable, 3PHVL-1730 3-Phase + neutral voltage test lead, test lead set red/black 0.18m, test lead set red/black 1.5m, alligator clips, 173X/174X soft case, cable marker kit, MP1-3R/1B-Magnet Probe 1 set (3 red, 1 black), 174X-hanger Kit (optional)
FLUKE-1746/30/INTL	Power quality logger with 24in/60cm 3,000A iFlex current probes, international version	
FLUKE-1746/B/INTL	Power quality logger without iFlex current probes, international version	
FLUKE-1748/15/INTL	Power quality logger with 24in/60cm 1,500A iFlex current probes, international version	Flexible current probe (1748/15/INTL and 1748/30/INTL only), USB stick, USB cable, 3PHVL-1730 3-Phase + neutral voltage test lead, test lead set red/black 0.18m, test lead set red/black 1.5m, alligator clips, 173X/174X soft case, cable marker kit, MP1-3R/1B-Magnet Probe 1 set (3 red, 1 black), 174X-hanger Kit
FLUKE-1748/30/INTL	Power quality logger with 24in/60cm 3,000A iFlex current probes, international version	
FLUKE-1748/B/INTL	Power quality logger without iFlex current probes, international version	

Fluke 1736 and 1738 Three-Phase Power Loggers

More visibility, reduced uncertainty and better power quality and energy consumption decisions

The Fluke 1736 and 1738 Three-Phase Power Loggers built with Fluke Connect® mobile app and desktop software compatibility give you the data you need to make critical power quality and energy decisions in real-time. The ideal test tools for conducting energy studies and basic power quality logging, the 1736 and 1738 automatically capture and log over 500 power quality parameters so you have more visibility into the data you need to optimize system reliability and savings.

- **Measure all three phases and neutral** with included four flexible current probes.
- **Comprehensive logging:** More than 20 separate logging sessions can be stored on the instruments. In fact, all measured values are automatically logged so you never loose measurement trends.
- **Capture dips, swells, and inrush currents:** includes event waveform (1738 only) snapshot and high resolution RMS profile, along with date, timestamp and severity to help pinpoint potential root causes of power quality issues.
- **Optimized user interface:** Capture the right data every time with quick, guided, graphical setup and reduce uncertainty about your connections with the intelligent verification function.
- **Fluke Connect® Compatible:** View data locally on the instrument, via Fluke Connect® mobile app and desktop software or through your facilities' WiFi infrastructure

Specifications

Accuracy

Parameter		Range	Resolution	Intrinsic accuracy at reference conditions (% of reading + % of full scale)
Voltage		1000 V	0.1 V	± (0.2 % + 0.01 %)
Current: Direct input	i17xx-flex 1500 12"	150 A	0.1 A	± (1 % + 0.02 %)
		1500 A	1 A	± (1 % + 0.02 %)
	i17xx-flex 3000 24"	300 A	1 A	± (1 % + 0.03 %)
		3000 A	10 A	± (1 % + 0.03 %)
	i17xx-flex 6000 36"	600 A	1 A	± (1.5 % + 0.03 %)
		6000 A	10 A	± (1.5 % + 0.03 %)
	i40s-EL clamp	4 A	1 mA	± (0.7 % + 0.02 %)
		40 A	10 mA	± (0.7 % + 0.02 %)
Frequency		42.5 Hz to 69 Hz	0.01 Hz	± (0.1 %)
Aux input		± 10 V dc	0.1 mV	± (0.2 % + 0.02 %)

Range = 1000 V x Irange

Ordering information

Models	Included accessories
FLUKE-1736 Three-Phase Power Logger	Instrument, power supply, voltage test leads, alligator clips (4x), 12 in 1,500 A flexible current probe (4x), soft case, Energy Analyze Plus software, WiFi adapter**, line cords, color coding set and documentation on USB flash drive
FLUKE-1738 Three-Phase Power Logger	Instrument, power supply, voltage test leads, alligator clips (4x), 12 in 1,500 A flexible current probe (4x), soft case, Energy Analyze Plus software, magnetic hanging strap, magnetic voltage probes (4x), WiFi/BLE adapter**, line cords, color coding set and documentation on USB flash drive
FLUKE-1738/Upgrade	Magnetic hanging strap, magnetic voltage probes (4x), WiFi/BLE adapter, Firmware license: PQ Health, Wave form Event Capture

**Not all models are available in all countries. Check with your local Fluke representative.

Fluke 1732 and 1734 Power Loggers

NEW

Energy logging is now within your reach—discover where you're wasting energy, optimize your facility's energy use and reduce your bill

The new Fluke 1732 and 1734 Three-Phase Electrical Energy loggers introduce a new simplicity to discovering sources of electrical energy waste. Discover when and where energy in your facility is being consumed; from the service entrance to individual circuits. Access and share data remotely with your team via the Fluke Connect® app so you can maintain safer working distances and make critical decisions in real-time, reducing the need for protective equipment, site visits and check-ins.

- **Key measurements:** Automatically capture and log voltage, current, power, power factor, energy and associated values
- **Fluke Connect® compatible*:** View data locally on the instrument, via Fluke Connect® mobile app and desktop software or through your facilities' WiFi infrastructure
- **Convenient instrument powering:** Power instrument directly from the measured circuit
- **Highest safety rating in the industry:** 600 V CAT IV/1000 V CAT III rated for use at the service entrance and downstream
- **Measure all three phases:** With included 3 flexible current probes
- **Comprehensive logging:** More than 20 separate logging sessions can be stored on the instruments. In fact, all measured values are automatically logged so you never loose measurement trends. They can even be reviewed during logging sessions and before downloading for real-time analysis
- **Bright, color touch screen:** Perform convenient in-the-field analysis and data checks with full graphical display
- **Optimized user interface:** Quick, guided, graphical setup ensures you're capturing the right data every time, and the intelligent verification function indicates correct connections have been made, reducing user uncertainty
- **Complete "in-the-field" setup through the front panel or Fluke Connect App:** No need to return to the workshop for download and setup or to take a computer to the electrical panel
- **Fully integrated logging:** Connect other Fluke Connect devices to the Fluke 1734 to simultaneously log up to two other measurement parameters, virtually any parameter available on a Fluke Connect wireless digital multimeter or module*
- **Energy Analyze Plus application software:** Download and analyze every detail of energy consumption with our automated reporting

*Not all models are available in all countries. Check with your local Fluke representative

Ordering information

Models	Included accessories
FLUKE-1732/INTL	Energy logger, international version (includes current probes), power supply, voltage test leads, alligator clips (4x), 12 in 1,500A flexible current probe (3x), soft case, energy analyze plus software, line cords, color coding set, documentation on USB flash drive
FLUKE-1732/B	Energy logger, basic version (excludes current probes), power supply, voltage test leads, alligator clips (4x), soft case, energy analyze plus software,line cords,color coding set,documentation on USB flash drive
FLUKE-1734/INTL	Energy logger, international with Fluke Connect (includes current probes), power supply, voltage test leads, alligator clips (4x, 12 in 1,500A flexible current probe (3x), soft case, energy analyze plus software,magnetic hanging strap,magnetic voltage probes (4x), WiFi/BLE adapter**, line cords, color coding set, documentation on USB flash drive
FLUKE-1734/B	Energy logger, with Fluke Connect® (excludes current probes), power supply, voltage test leads, alligator clips (4x), soft case, energy analyze plus software, magnetic hanging strap, magnetic voltage probes (4x), line cords, color coding set, documentation on USB flash drive
FLUKE-1734/WINTL	Energy Logger, international wireless version (includes current probes), power supply, voltage test leads, alligator clips (4x), 12 in 1,500A flexible current probe (3x), soft case, Energy Analyze Plus software, magnetic hanging strap, magnetic voltage probes (4x), WiFi/BLE adapter**, line cords, color coding set, documentation on USB flash drive

Fluke 345 Power Quality Clamp Meter

Troubleshoot modern electrical loads

The Fluke 345 is more than a power meter. Combining the functions of a clamp meter, oscilloscope, data logger and digital power meter into one handy device. The Fluke 345 is ideal for working with variable frequency motor drives, high efficiency lighting and other loads using switching electronics.

- Clamp-on measurement of ac current up to 1400 A rms and dc current up to 2000 A without breaking the circuit
- CAT IV 600 V power analyzer is rated for use at the service entrance
- Clamp meter performs even in noisy environments with distorted waveforms present on electronic loads with low-pass filter
- Identify intermittent faults by logging any power quality parameter for minutes, or over a month, including harmonics
- Analyze, log and troubleshoot harmonics digitally or graphically
- Capture and analyze inrush current and nuisance tripping from 3 seconds to 300 seconds
- View graphs and generate reports using power analyzer with included Power Log software

Fluke VR1710 Power Quality Recorder

- Fast and easy recording of voltage trends, dropouts and power quality to easily pinpoint the root cause of single phase voltage problems
- Min, Max, and Average RMS values (1/4 cycle) with time stamp, transient display (>100 µs) with time stamp
- Identify problems with power quality or equipment related Flicker recording to EN 61000-4-15, individual harmonic and THD values with trends
- Includes PowerLog software for quick download, analysis and automatic reporting
- Generate power quality reports automatically with pre-set templates

Ordering information

Models	Included accessories
FLUKE-345 Clamp-On Power Meter	Test leads, alligator clips, test probes, Power Log software, USB cable, international ac adapter/battery eliminator, soft carrying case, users manual, multi-language manual on CD
FLUKE-VR1710 Voltage Quality Recorder	USB cable, Power Log software CD, universal power cord adapters

Fluke Norma 4000 and 5000 Precision Power Analyzers

Fluke Norma 4000

Fluke Norma 5000

For field and laboratory testing

Fluke Norma 4000 and 5000 Precision Power Analyzers offer easy and straight-forward operation with unmatched price performance. Features include: 1 to 6 power phases, 144 mm (5.7 in) color display, harmonic analysis, scope mode, vector diagram display, recorder function, Fluke NormaView PC software and 4MB RAM data memory.

- A variety of standard configurations allows users to choose the exact functionality required for their unique application
- Inputs are galvanically isolated to avoid short circuits in all applications, and simultaneous parallel acquisition of all phases allows for accurate viewing of dynamic events dc to 3 MHz/10 MHz bandwidth for reliable measurement precision
- Voltage, current and power harmonics FFT analysis to the 40th harmonic, vector diagram, and Digital Oscilloscope (DSO) mode included in the base unit
- PI1 process interface to measure torque and speed with external sensors, plus four analog outputs for easy use on motor and drive applications
- Data download, analysis and report writing with supplied Fluke NormaView PC software

Ordering information

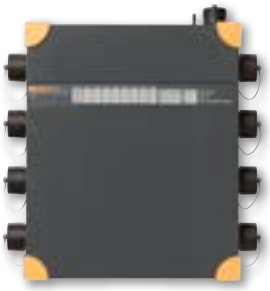
Models	Included accessories
FLUKE-Norma 4000 High Precision Power Analyzer	Power supply cable, NormaView PC software, test certificate, calibration values, users manual
FLUKE-Norma 5000 High Precision Power Analyzer	

Fluke 1750 Three-Phase Power Recorder

Never miss capturing a disturbance

The Fluke 1750 Power Recorder and the Fluke Power Analyze software allows you to easily record three-phase power quality and monitor for power quality disturbances. These power meters automatically record every power quality parameter and event, on every cycle—all the time.

- All measurements comply with IEC61000-4-30 standards for correct evaluation of all measured values including voltage, current, power, harmonics, flicker etc.
- PDA wireless "front panel interface" provides a window into what the instrument is recording, enabling quick and reliable configuration even in awkward test locations
- Cross-channel and current triggering capture every measurement, on every channel, every time
- With intuitive PC software, easily analyze data and generate reports. Automated EN50160 reporting and compliance
- Voltage and current measurements on three phases, neutral and ground



Fluke 1760 Three-Phase Power Quality Recorder

Captures the most comprehensive details

The Fluke 1760 Three-Phase Power Quality Recorder is fully compliant to IEC 61000-4-30 Class-A, for advanced power quality analysis and consistent compliance testing. Designed for analysis of utility and industrial power distribution systems, in medium- and low-voltage networks, this power quality monitor provides the flexibility to customize thresholds, algorithms, and measurement selections.

- Use GPS time synchronization to correlate data with events or datasets from other instruments with precision
- Using flexible and fully configurable thresholds and scale factors, pinpoint specific issues by defining the detailed criteria for detection and recording of disturbances
- 10 MHz, 6000 Vpk waveform capture for a detailed picture of even the shortest event
- 2GB data memory enables detailed, simultaneous recording of numerous power parameters for long periods of time
- Comprehensive software provides trend diagrams for root cause analysis, statistical summaries, report writing and real-time data monitoring in the online mode
- Quick setup with automatic sensor detection; sensors are instrument powered, eliminating the need for batteries

Specifications

	1760TR	1760	1760TR BASIC	1760 BASIC
Online mode (oscilloscope, transients and events)	•	•	•	•
Fast transient analysis up to 10 MHz	•		•	
Four 600 V voltage probes	•	•		
Four dual-range flexible current probes (1000 A/200 A ac)	•	•		
GPS time sync receiver	•	•		

Ordering information

Models	Included accessories
FLUKE-1750 Three-Phase Power Recorder Kit	Acquisition unit, PDA and charger, power plug adapters, 4 x 400 A 3140-PR current probes (1750 only), 4 x 1000 A 3210-PR-TF iFlex current probes (1750-TF only), five test leads and clips, SD memory card, Fluke Power View and Fluke Power Analyze software, power cord with international plug set, ethernet cable, color localization set, users manual and CD
FLUKE-1750-B Three-Phase Power Recorder Basic Kit	
FLUKE 1750-TF Three-Phase Power Recorder Kit	
FLUKE-1760 Three-Phase Power Recorder	Acquisition unit, voltage and current probes (1760, 1760TR), GPS time sync receiver (1760TR, 1760TR Basic) Fluke PQ Analyze software, power cord with international plug set, ethernet cable, color localization set, users manual and CD
FLUKE-1760 Basic Three-Phase Power Recorder	
FLUKE-1760TR Three-Phase Power Recorder	
FLUKE-1760TR Basic Three-Phase Power Recorder	

In the U.S., these power quality recorders are sold exclusively through power quality representatives. To request a demonstration, or to order, call 1-888-257-9897 or email questions to fpqsupport@fluke.com.

FLUKE®

Process Calibration Tools

Selection guide

Models	Process mA Clamp Meter 773	Process Meter® Test Tool 789	Loop Calibrator 709H	Pressure Calibrator 719/719PRO	Temperature Calibrator 724	Precision Multifunction Process Calibrator 726	Automatic Pressure Calibrator 729	Intrinsically Safe Calibrator 725Ex	Documenting Process Calibrator 754
Measure									
V dc	30 V	1000 V	30 V		30 V	30 V	0 V dc to 30 V dc	30 V	300 V
V ac (true-rms)		1000 V							300 V
Resistance		40 MΩ			3200 Ω	4000 Ω		3200 Ω	11 kΩ
A dc max	20.99, 99.9 mA	30 mA, 1 A	24 mA	24 mA	24 mA	24 mA	24 mA	24 mA	110 mA
A ac max		•							
Frequency		20 kHz				15 kHz		10 kHz	50 kHz
Pressure				2 bar, 10 bar, 20 bar		•[1]	30 psi / 150 psi / 300 psi	•[3]	•[1]
Temperature: RTDs				719Pro optional	7 types	8 types	optional RTD Probe	7 types	8 types
Temperature: TCs					12 types	13 types		12 types	13 types
Source/Simulate									
V dc	10 V				10 V	20 V	12 V dc to 30 V dc	10 V	15 V
Resistance					3200 Ω	4000 Ω		3200 Ω	11 kΩ
mA dc	24 mA	24 mA	24 mA	24 mA		24 mA	0mA to 24mA	24 mA	22 mA
mA source; auto step, auto ramp	•	•	•	•		•	Pressure or Current	•	•
Frequency						15 kHz		10 kHz	50 kHz
Temperature: RTDs					7 types	8 types		7 types	8 types
Temperature: TCs					12 types	13 types		12 types	13 types
Record									
Min/Max		•		•			•		•
Hold	•	•		719			•		•
As found/As left results							•		•
Log data			•				•		•
Upload data to PC			•				•		•
Remote operation		•				•			
Features									
24 V loop supply	•	•	•	•	•	•	•	12 V	26 V
Non-contact mA measurement	•								
HART communication			•				•		•
Intrinsically safe (ATEX)								•	
Traceable calibration certification			•	•	•	•	•	•	•
Pressure enabled[2]				•		•	•	•[3]	•
Warranty (years)	3	3	3	3	3	3	3	3	3

[1] Fluke 750P Pressure Modules required.

[2] Fluke Process Calibrators in this guide displaying the Pressure Enabled symbol display readings from the 750P Series Pressure Modules.

[3] Fluke 700PEx Pressure Module required.

Model	914X/ 9190A	P3000	152X	9103/ 9140	418X	1620A	P5500	3130	2700G	1586A
Range	–95 °C to 660 °C	To 400 MPa (60,000 psi)	–200 °C to 420 °C	–25 °C to 350 °C	–15 °C to 500 °C	0 °C to 50 °C; 0 % to 100 % RH	To 70 MPa (20,000 psi)	Vacuum to 20 bar	-0.1 to 70 MPa (–15 to 10,000 psi)	Various
Measure										
Temperature	•		•	•	•	•				•
Pressure		•						•	•	
Humidity						•				
DC volt/current								•		•
Source										
Temperature	•			•						
Pressure		•					•	•	•	
Thermocouple										

Fluke 771, 772 and 773 mA Process Clamp Meters

Measure output signals without breaking the loop

The Fluke 771, 772 and 773 mA Process Clamp Meters pay for themselves. These meters save time by measuring 4 to 20 mA signals (five) times faster than traditional DMMs without operator intervention, offering loop calibration, voltage testing and eliminate time wasting activities.

Use the Fluke 771, 772 and 773 to:

- Measure 4–20 mA signals without "breaking the loop," save time and money troubleshooting

Use the Fluke 772 and 773 to:

- Source 4–20 mA signals for testing control system I/O or I/Ps
- Simulate 4–20 mA signals for testing control system I/O
- Measure 4–20 mA signals with in-circuit measurement
- Power a transmitter with the 24 V loop power supply
- Automatically ramp and step change the 4–20 mA output for remote testing

Use the Fluke 773 to:

- Measure dc voltage to verify 24 V power supplies or voltage I/O signals
- Source dc voltage to test voltage input devices
- Scaled mA output signal enables a logging DMM (289) or 709H Precision Loop Calibrator to record 4–20 mA signal without breaking the loop
- mA in/out: simultaneously source a mA signal while measuring a mA signal with the clamp

Features

	mA measure w/jaw	mA measure In circuit	mA source	mA sim	Loop power 24 V	DCV source 0–10 V	DCV measure 0–30 V	Scaled mA output to mA input	mA in/out
771	•								
772	•	•	•	•	•				
773	•	•	•	•	•	•	•	•	•

Specifications

	Function	Resolution and range	Accuracy	Notes
771, 772, 773	mA measurement	0 mA to 20.99 mA 21.0 mA to 100.0 mA	0.2 % + 5 counts 1 % + 5 counts	Measured by clamp
772 and 773	mA measurement	0 mA to 24.00 mA	0.2 % + 2 counts	Measured in series with test jacks
772 and 773	mA source	0 mA to 24.00 mA	0.2 % + 2 counts	Maximum mA drive: 24 mA into 1,000 ohms
772 and 773	mA simulate	0 mA to 24.00 mA	0.2 % + 2 counts	Maximum voltage 50 V dc
773	Voltage source	0 V dc to 10.00 V dc	0.2 % + 2 counts	2 mA maximum drive current
773	Voltage measure	0 V dc to 30.00 V dc	0.2 % + 2 counts	

Measure process and other automation 4 to 20 mA signals without breaking the loop.

General specifications

	771	772	773
Battery	Two 1.5 V, Alkaline, IEC LR6	Four 1.5 V, Alkaline, IEC LR6	
Working hours	20 hours typical	12 hours @ 12 mA source into 500 ohms	
Size (HxWxL)	59 mm x 38 mm x 212 mm (2.32 in x 1.5 in x 8.35 in)	41.3 mm x 76 mm x 248 mm (1.625 in x 3 in x 9.75 in)	
Weight	260 g (9.1 oz)	415 g (14 oz)	
Operating temperature	-10 °C to 50 °C		
IP rating	IP 40		
Warranty	Three-year, one-year on mA clamp assembly and cable		

Ordering information

Models	Included accessories
FLUKE-771 Milliamp Process Clamp Meter	Soft carrying case, users manual
FLUKE-772 Milliamp Process Clamp Meter	Test leads, alligator clips and hanging strap, soft carrying case, users manual
FLUKE-773 Milliamp Process Clamp Meter	

FLUKE CONNECT™ (789 only)

Fluke 787B and 789 ProcessMeter™

NEW

1000 V CAT III (787) 600 V CAT IV (789) True RMS

Double the troubleshooting power so you can do more, while carrying a lot less

The Fluke 787B and 789 ProcessMeter™ double troubleshooting capabilities by combining the power of a safety rated digital multimeter and mA loop calibrator into a single, compact test tool. Whether you only need to source and simulate mA, or need a 24V loop power supply, Fluke has a ProcessMeter™ test tool designed specifically to meet your needs. Based on the trusted measurement capabilities of the Fluke 87 DMM, the 787B and 789 add the ability to measure, source and simulate mA with the accuracy and resolution you would expect from a Fluke mA loop calibrator, giving you the ideal tool for troubleshooting and calibrating current loop applications.

With Fluke Connect® mobile app and desktop software compatibility technicians can wirelessly monitor, log, and share data from the field with their team anytime, from anywhere*.

787B and 789 key features

- 20 mA dc current source/measure/simulate
- Simultaneous mA and % of scale readout
- DMM designed to meet 1000 volt IEC 61010 CAT III and 600 V CAT IV standards
- Fluke Connect® compatibility for wireless data logging (with IR3000FC module)*
- Precision 1000 V, 440 mA true-rms digital multimeter
- Frequency measurement to 20 kHz
- Min/Max/Average/Hold/Relative modes; Diode test and continuity beeper
- Manual step (100 %, 25 %, Coarse, Fine) plus Auto Step and Auto Ramp
- Externally accessible battery for easy battery changes

789 additional features

- 24 V Loop power supply
- HART mode setting with loop power (adds 250 ohm resistor)

*Not all models are available in all countries. Check with your local Fluke representative.

Fluke 789 ProcessMeter is two tools in one, a CAT IV 600V safety rated DMM and a full functioning mA loop calibrator. Perfect for instrumentation and I and E technicians.

Specifications

Measurement function	Best accuracy range and resolution	(% of reading + LSD)
V dc	400.0 mV, 4.000 V, 40.00 V, 400.0 V, 1000 V	0.1 % + 1
V ac (true-rms)	400.0 mV, 4.000 V, 40.00 V, 400.0 V, 1000 V	0.7 % + 2
mA dc	30.000 mA	.05 % + 2
A dc	1.000 A (0.440 A continuous)	0.2 % + 2
A ac	1.000 A (0.440 A continuous)	1 % + 2
Resistance	400.0 Ω, 4.000 kΩ, 40.00 kΩ, 400.0 kΩ, 4.000 MΩ, 40.00 MΩ	0.2 % + 1
Frequency (0.5 Hz to 20 kHz)	199.99 Hz, 1999.9 Hz, 19.999 kHz	0.005 % + 1
Diode test	2.000 V (shows dioxide voltage drop)	2 % + 1
Continuity	Beeps for resistance < approx. 100 ohms	

Output function	Range and resolution	Drive capability	Accuracy (% of span)
DC current output-source mode (internal battery operation)	0.000 mA to 20.000 mA or 4.000 mA to 20.000 mA (selectable at power-up) Over-range to 24.000 mA	789: 24 V compliance or, 1,200 ohms, @ 20 mA	0.05 %
DC current output-simulate mode (external 24 V loop supply, up to 48 V on 789 only)	0.000 mA to 20.000 mA or 4.000 mA to 20.000 mA, (selectable at power-up) Over-range to 24.000 mA	1000 ohms, @ 20 mA	0.05 %
24 V loop supply	Minimum 24 V	250 ohms @ 20 mA	> 24 V
Current adjustment modes	Manual: coarse, fine, 25 % and 100 % step | Automatic: slow ramp, fast ramp, 25 % step		

General specifications	
Maximum voltage applied between any jack and earth ground	1000 V RMS
Storage temperature	-40 °C to 60 °C
Operating temperature	-20 °C to 55 °C
Temperature coefficient	0.05 x (specified accuracy) per °C (for temperatures < 18 °C or > 28 °C)
Relative humidity	95 % up to 30 °C; 75 % up to 40 °C; 45 % up to 50 °C; 35 % up to 55 °C
Vibration	Random, 2 g, 5-500 Hz
Shock	1 meter drop test
Safety	IEC61010-1, Pollution Degree 2/IEC61010-2-033, CAT IV 600 V/CAT III 1000
Size (HxWxL)	50 mm x 100 mm x 203 mm (1.97 in x 3.94 in x 8.00 in)
Weight	600 g (1.3 lbs)
Battery:	Four AA alkaline batteries
Battery life	140 hours typical (measurement), 10 hours typical (sourcing 12 mA)
Warranty	Three years

Ordering information

Models	Included accessories
FLUKE-789 ProcessMeter	Test leads, alligator clips, 4 AA alkaline batteries (installed), quick reference guide, users manual, multi-language manual CD
FLUKE-787B ProcessMeter	Test leads, alligator clips, holster with test lead storage, one 9 V alkaline battery (installed), quick reference guide, users manual, multi-language manual CD

***Fluke Connect (FC) system is not available in all countries. Non-FC models are available. Check with your local authorized Fluke distributers for more info.**

Fluke 715, 707 and 705 Loop Calibrators

Delivers outstanding performance, durability and reliability

Fluke 715 Loop Calibrator

The Fluke 715 Volt/mA Calibrator can measure loop current as well as voltage output.

- Source voltage to 200 mV or 20 V
- Measure loop current (0–20 mA, 4–20 mA) signals with 0.01 % accuracy and 1 µA resolution
- Measure voltage output process signals from PLCs, transmitters
- Source or simulate 4–20 mA loop current
- 24 V loop supply with simultaneous current measurement
- Ramp and Step Ramp output functions

Fluke 707 and 705 Loop Calibrators

With large displays and simple interface, the Fluke 707 and 705 provide easy to use, one-hand operation.

- Innovative output adjustment dial on 707 for 1 µA and 100 µA resolution
- Simultaneous mA and % readout for quick, easy interpretation of readings
- mA accuracy of 0.015 % on the Fluke 707 and 0.02 % on the 705
- HART™ mode on 707 connects 250 ohm resistor in series with 24 V loop for compatibility with HART communicators
- Push button 25 % steps for fast, easy linearity checks
- "Span Check" for fast confirmation of zero and span
- Selectable slow and fast linear step ramp provide ramping outputs for valve slewing, remote testing and loop functional tests
- 24 V internal loop supply, so you can power and read a transmitter at the same time without carrying a DMM; 0–20 mA or 4–20 mA default start up modes

Specifications

Functions	Fluke 705 and 707	Fluke 715	
Voltage measurement			
Range	0 V to 28 V	0 mV to 200 mV	0 V to 25 V
Resolution	1 mV	10 µV	1 mV
Accuracy	705: 0.025 % Rdg + 1 LSD 707, 707Ex: 0.015 % Rdg + 2 LSD	0.01 % Rdg + 2 LSD	
Current measurement			
Range	0 mA to 24 mA	0 mA to 24 mA	
Resolution	0.001 mA	0.001 mA	
Accuracy	705: 0.02 % Rdg + 2 LSD 707, 707Ex: 0.015 % Rdg + 2 LSD	0.01 % + 2 LSD	
Current sourcing			
Range	0 mA to 20 mA or 4 mA to 20 mA	0 mA to 20 mA or 4 mA to 20 mA	
Accuracy	705: 0.025 % Rdg + 2 LSD 707, 707Ex: 0.015 % Rdg + 2 LSD	0.01 % Rdg + 2 LSD	
Drive capability	705: 1000 W @ 24 mA 707: 1200 W @ 24 mA 707Ex: 700 W @ 20 mA	1000 W @ 24 mA	
Loop power while measuring mA	24 V	24 V	
Voltage sourcing			
Display current and % of span	•	mA or %	
Auto step, auto ramp	•	•	
Span Check	•	•	
Battery life	18 hours typical at 12 mA	18 hours typical at 12 mA	
Warranty	Three-year		

Fluke loop calibrators are reliable and accurate. The 709H adds basic HART communication (see page 58).

Ordering information

Models	Included accessories
FLUKE-715 Volt/mA Calibrator	Test leads, alligator clips, holster, traceable calibration report and data, single 9 V alkaline battery, instruction sheet (14 languages)
FLUKE-707 Loop Calibrator	
FLUKE-705 Loop Calibrator	

Fluke 753 and 754 Calibrators

Does the work of several tools for process systems

- Calibrate temperature, pressure, voltage, current, resistance and frequency instruments
- Built-in procedures for transmitters, square root transmitters, pressure and temperature switches
- Simultaneously measure and source
- Automatically capture calibration results
- Document procedures and results to meet ISO 9000, EPA, FDA, OSHA and other requirements
- Measure/simulate 13 types of thermocouples and eight RTDs

754: Get HART-ability™

The Fluke 754 offers all of the capabilities of the 753, plus the ability to calibrate, maintain and troubleshoot HART instrumentation. Integrated HART communication functions permit you to monitor, control and calibrate HART instrumentation. It handles fast pulsed instruments such as RTD transmitters and PLCs responding to pulses within 1 ms.

753: A complete documenting calibrator

The 753 is a complete multifunction documenting calibrator and includes a PC interface that lets you load procedures, lists and instructions created with software—or unload data for printing, archiving, and analysis. The 753 can hold a full week of calibrations and procedures.

Fluke 709/709H Precision Current Loop Calibrators

- Best-in-class accuracy at 0.01 % reading
- HART Communication (709H only) communicate with and test HART smart instruments
- 24 V dc loop power with mA measure mode
- Built in selectable 250 Ω resistor for HART communications
- Valve test (source and simulate defined mA values with % keys)
- Upload logged mA measurements and HART device data using the 709H with optional 709H/TRACK software

Calibrate and document the performance of HART smart pressure transmitters with the Fluke 754 and 750 Series Pressure Modules.

75X Calibrator Specifications

	Measure	Sourcing
DC voltage	0.020 % reading + 0.005 % full scale	0.01 % output + 0.005 % full scale
DC current	0.01 % reading + 5 µA	0.01 % output + 0.003 mA
Resistance	0.05 % reading + 50 mΩ	0.01 % output + 240 mΩ
Frequency	0 to 50 KHz, ± 0.5 Hz to 1100 Hz	0 to 50 KHz, ± 0.1 Hz to 1099.9 Hz
Thermocouples	0.3 °C	0.2 °C
RTDs	0.3 °C	0.1 °C
Pressure	To 0.025 % of full scale, per pressure module specifications (Fluke 750P Series)	
Battery life	Typically over eight hours	
Internal battery pack	Li ion 4400 mAh	
Size (HxWxD)	245 mm x 136 mm x 63 mm (9.6 in x 5.4 in x 2.5 in)	
Weight	1.2 kg (2.7 lb)	
Calibration cycles	One- and two-year	
Warranty	Three-year	

Ordering information

Models	Included accessories
FLUKE-754 Documenting Process Calibrator-HART	Three sets of stackable test leads, three sets of test probes with three sets of "extended tooth" alligator clips, two sets of hook clips, li-ion battery pack, battery charger, field soft case, USB communication cable, getting started guide, instruction manual on CD, traceable certificate of calibration, DPC/TRACK2 sample software that enables upload and printing of calibration records. HART communication cable (754 only)
FLUKE-753 Documenting Process Calibrator	
FLUKE-709 Precision Current Loop Calibrator	Test leads, test probes and alligator clips. Quick reference guide, traceable certificate of calibration, manual on CD. Additional hook clips (709H only) for HART communication
FLUKE-709H Precision Current Loop Calibrator-HART	

HART is a registered trade mark of the HART Communications Foundation.

Fluke 726 and 725 Multifunction Process Calibrators

Calibrate almost anything

The Fluke 726 and 725 measure and source nearly all process parameters. Interpret results without the help of a calculator and store measurement data for later analysis.

- Precise measurement and calibration source performance, accuracies of 0.01 % (726)
- Transmitter error % calculation, source/simulate volts, mA, thermocouples, RTDs, frequency, ohms and pressure to calibrate transmitters
- Memory storage for up to eight calibration setups
- Frequency totalizer and pulse train source mode for enhanced flowmeter testing (726)
- HART mode inserts 250 ohm resistor in mA measure and source mode
- Integrated pressure switch test to capture the set, reset and deadband of a switch (726)
- RTD curves, add temperature calibration constants for certified RTD probes
- Voltage input protection design for improved reliability
- Measure/source pressure using any of 50 Fluke 750Pxx Pressure Modules
- Source mA with simultaneous pressure measurement to conduct valve and I/P tests
- Perform fast linearity tests with auto step and auto ramp features
- Intrinsically safe version available (725)

Pressure Enabled

Gold Instrument CarePlan (725)

Measure and source

Functions	Range or type	Resolution	Accuracy	Notes
Voltage dc	0 to 100 mV 0 to 10 V (source) **0 to 20 V (source)** 0 to 30 V (measure)	0.001 mV 0.001 V 0.001 V 0.001 V	**0.01 %,** 0.02 % Rdg + 2 LSD	Max load, 1 mA
mA	0 to 24	0.001 mA	**0.01 %,** 0.02 % Rdg + 2 LSD	Max load, 1000 Ω
mV (TC terminals)	-10.00 mV to +75.00 mV	.01 mV	**0.01 %**, 0.02 % of range + 1 LSD	
Ohms	15 Ω to 3,200 Ω **5 Ω to 4,000 Ω**	0.01 Ω to 0.1 Ω	0.10 Ω to 1.0 Ω **0.015 %**	
Hz - CPM	2.0 to 1,000 CPM 1 to 1000 Hz 1.0 to 10.0 kHz **10.0 to 15.0 kHz**	0.1 CPM 1 Hz 0.1 kHz **0.1 kHz**	± 0.05 % ± 0.05 % ± 0.25 % **± 0.05 %**	Source; 5 V p-p **1 V to 20 V p-p** squarewave, -0.1 V offset
Loop supply	24 V dc	N/A	10 %	
T/C	J, K, T, E, L, N, U, XK	0.1 °C, 0.1 °F	to 0.7 °C **to 0.2 °C**	
T/C	B, R, S, BP	1 °C, 1 °F	to 1.7 °C **to 1.2 °C**	
RTDs	**Cu (10)**, Ni120 (672) Pt 100, 200, 500, 1000 (385) Pt 100 (3916), Pt 100 (3926)	**0.01 °C,** **0.01 °F** 0.1 °C, 0.1 °F	**to 0.15 °C** to 0.2 °C	

General specifications	
Storage/operating temperature	-20 °C to 71 °C/-10 °C to 55 °C (726: -10 °C to 50 °C)
Relative humidity	90 % (10 °C to 30 °C); 75 % (30 °C to 40 °C); 45 % (40 °C to 50 °C); 35 % (50 °C to 55 °C)
Shock	1 meter drop test
Battery life	25 hours typical (4 AA alkaline batteries)
Size (HxWxD)	200 mm x 96 mm x 47 mm (7.9 in x 3.8 in x 1.9 in)
Weight	650 g (23 oz)
Warranty	Three-year

Unique 726 specifications are bold.

Ordering information

Models	Included accessories
FLUKE-726 Precision Multifunction Process Calibrator	Test leads, test clips, one pair of stackable test leads, traceable certificate of calibration, product overview manual, users manual in 14 languages on CD
FLUKE-725 Multifunction Process Calibrator	

Calibrate temperature transmiters easily with Fluke 725 and 726 calibrators.

Add a 750P series pressure module to the 725 or 725 to make it a pressure calibrator.

Fluke 712B, 714B and 724 Temperature Calibrators

Highly accurate single function temperature calibrator

For the temperature calibration professional that wants a highly accurate, easy-to-use, single function temperature calibrator the 712B and 714B are ideal. For temperature calibration professionals, these temperature calibrators deliver outstanding performance, durability and reliability and each calibrator is EMI tolerant, dust- and splash-resistant, and features a removable battery door for quick battery changes.

- The 712B can measure and simulate (13) different RTD types and resistance
- The 714B can measure and simulate (17) different thermocouple types and millivolts
- Measure 4 to 20 mA signals while simultaneously sourcing a temperature signal
- The 724 specialty model will source/measure TCs, RTDs, volts and ohms as well as measure mA while supplying loop power
- Hanging tool designed in and included with every unit (712B and 714B)
- Configurable 0 % and 100 % source settings for quick 25 % linearity checks
- Linear ramp and 25 % step auto ramp based on 0 % and 100 % settings
- Dual inputs and backlit display for easy interpretation of measurements
- Power down settings remembered at power up for easy restart of tests
- One-year and two-year specifications and traceable certificate of calibration (712B and 714B)

Specifications

	Functions	Range	Resolution	Accuracy	Notes
712B	Measure/Simulate RTD	-200 °C to 800 °C (Pt 100-385)	0.1 °C, 0.1 °F	0.2 °C, 0.4 °F (Pt 100-385)	13 types Pt; 100 200 500 1000 (385); Pt 100 (392); Pt 100 (392) JIS; Ni 120 (672)
	Measure/Simulate Resistance	0.00 Ω to 400.00 Ω	0.01 Ω	0.015 % + 0.005 Ω	
		400.0 Ω to 4000.0 Ω	0.1 Ω	0.015 % + 0.05 Ω	
714B	Measure/Simulate Thermocouple	-200 °C to 1800 °C, depending on type (K, -200 °C to 1370 °C)	0.1 °C or °F (1 °C or °F; BRS)	0.5 °C, 0.8 °F (Type K)	17 TC types; J K T E R S B per NIST 175 and ITS-90 L U per DIN 43710 and PTS-68
	Measure/Simulate mV	10 mV to 75 mV	0.01 mV	0.015 % + 10 µV	

General specifications (712B/714B)	
Maximum voltage	30 V
Operating temperature	-10 °C to 50 °C
Power	4 AA alkaline batteries/NEDA code: 15A, IEC code: LR6
Safety/EMC	IEC 61010-1, Max 30 V to earth, Pollution Degree 2/IEC 61326-1, Portable
Size (HxWxD)	188.5 mm x 84 mm x 52 mm (7.42 in x 3.31 in x 2.04 in)
Weight	515 g (18.16 oz)
Warranty	Three-year

714B is the ideal tool for testing thermocouple input temperature transmitters.

Ordering information

Models	Included accessories
FLUKE-724 Temperature Calibrator	Test leads, test clips, one pair of stackable test leads, product overview manual, users manual in 14 languages on CD
FLUKE-714B Themocouple Calibrator	Test leads, alligator clips (excluding model 714), holster with test lead storage, single 9 V alkaline battery and instruction sheet (14 languages)
FLUKE-712B RTD Calibrator	

Fluke Calibration Temperature Sources

Fluke 9142/9143/9144 Field Metrology Wells

Small dry wells for big field applications

Applications: Temperature instrument calibration, 4 to 20 mA loop test and calibration, temperature switch testing.

- Cool to -25 °C in 15 minutes (9142) and heat to 660 °C in 15 minutes (9144)
- Built-in two-channel readout for PRT, RTD, thermocouple, 4-20 mA current
- Stability to ± 0.01 °C
- Accredited calibration

Fluke 9103/9140 Field Dry-Well Calibrators

Portable instruments with great performance

Applications: Temperature instrument calibration, temperature switch tests.

- Two models ranging from -25 °C to 350 °C
- Accuracy to ± 0.25 °C
- Stability to ± 0.02 °C

Fluke 4180/4181 Precision Infrared Calibrators

Accredited performance for point-and-shoot calibrations

Applications: Infrared thermometer calibration.

- Calibrated radiometrically for meaningful, consistent results
- Accredited calibration accurate to ± 0.35 °C
- Wide coverage -15 °C to 500 °C
- Stability to ± 0.01 °C

Fluke 9190A Ultra-Cool Field Metrology Well

Ultra-cool dry-block calibrator with best-in-class stability

Applications: Temperature instrument calibration, 4-20 mA loop test and calibration.

- Wide temperature range: -95 °C to 140 °C
- Accuracy to ± 0.05 °C
- Fast cooling time from 23 °C to -95 °C: 90 minutes

Ordering information

Models	Select an insert	Included accessories
9103 Field Dry-Well Calibrator, –25 °C to 140 °C **9140** Field Dry-Well Calibrator, 35 °C to 350 °C	Insert A: 1/16 in (1.6 mm), 1/8 in (3.2 mm), 3/16 in (4.8 mm), 1/4 in (6.35 mm), 3/8 in (9.5 mm) and 1/2 in (12.7 mm) Insert C: 6 at 1/4 in (6.35 mm)	Insert, insert removal tool, software, calibration certificate
9190A Field Metrology Well, –95 °C to 140 °C **9190A-P** Field Metrology Well, –95 °C to 140 °C, process version	9190-INSA: imperial misc holes 9190-INSC: 6 x 0.25 in holes	Insert, insert removal tool, manual, software, USB cable, accredited calibration certificate
9142 Field Metrology Well, –25 °C to 150 °C **9142-P** Field Metrology Well, –25 °C to 150 °C, process version	9142-INSA, imperial misc holes 9142-INSB, imperial comp holes 9142-INSC, 6 x 0.25 in holes	Insert, insert removal tool, test lead kit (process version), software, manual, accredited calibration certificate
9143 Field Metrology Well, 33 °C to 350 °C **9143-P** Field Metrology Well, 33 °C to 350 °C, process version	9143-INSA, imperial misc holes 9143-INSB, imperial comp holes 9143-INSC, 6 x 0.25 in holes	Insert, insert removal tool, test lead kit (process version), software, manual, accredited calibration certificate
9144 Field Metrology Well, 50 °C to 660 °C **9144-P** Field Metrology Well, 50 °C to 660 °C, process version	9144-INSA, imperial misc holes 9144-INSB, imperial comp holes 9144-INSC, 6 x 0.25 in holes	Insert, insert removal tool, test lead kit (process version), software, manual, accredited calibration certificate
4180 Precision Infrared Calibrator, –15 °C to 120 °C **4181** Precision Infrared Calibrator, 35 °C to 500 °C	N/A	Report of Calibration (NVLAP accredited), power cord, user's guide, documentation CD, target cover, serial cable

Pair the Fluke 753 or 754 with a dry-well calibrator to calibrate and document both temperature transmitter electronics and sensor performance.

Fluke 1523 and 1524 Reference Thermometers

Measure, graph and record three sensor types with one tool

Get plug and play measurement of PRTs, RTDs, Thermistors, and Thermocouples with high accuracy. The model 1524 has two channels so you can do twice the work in half the time. Both instruments are handheld and battery powered with the option of using an included ac adapter.

Fluke 1586A Super-DAQ Precision Temperature Scanner

Use as a multi-channel data logger in the factory or as a precision reference thermometer in the lab

The 1586A is the most accurate (± 0.002 °C), secure and flexible temperature data acquisition system on the market. The 1586A Super-DAQ scans and records temperature (PRTs, Thermocouples, and Thermistors), dc voltage, dc current, and resistance for up to 40 input channels and scan speeds as fast as 10 channels per second. The 20 channel High-Capacity Modules are for data logging, and 20 channel DAQ-STAQ Multiplexer is for lab applications.

Fluke 7526A Precision Process Calibrator

The 7526A offers the best balance of economy and accuracy for bench top calibration of temperature and pressure process instrumentation. Easily calibrate RTD and thermocouple readouts, pressure gauges, temperature transmitters, digital process simulators, data loggers, multimeters and more.

Fluke 1551A Ex and 1552A Ex “Stik” Thermometers

The easiest to use precision thermometer

Intrinsically safe (ATEX and IECEx compliant) with user-configurable temperature Trend/ Stability indicator, 300-hour battery life, and optional data logging.

Ordering information

Models	Included accessories
FLUKE-1523-P1 1 channel thermometer readout bundle	5616 PRT, Smart connector for thermocouples, TPAK, and case
FLUKE-1524-P1 2 channel thermometer readout bundle	
FLUKE-1586A/1HC 120 Super-DAQ Precision Temperature Scanner, 120 V	High-Capacity Module, software CD
FLUKE-1586A/1HC 120/C Super-DAQ Precision Temperature Scanner, 120 V	High-Capacity Module, Accredited Calibration, software CD
FLUKE-1586A/1DS 120 Super-DAQ Precision Temperature Scanner, 120 V	DAQ-STAQ Multiplexer, software CD
FLUKE-1586A/1DS 120/C Super-DAQ Precision Temperature Scanner, 120 V	DAQ-STAQ Multiplexer, Accredited Calibration, software CD
FLUKE-1586A/2HC 120 Super-DAQ Precision Temperature Scanner, 120 V	2 High-Capacity Modules, software CD
FLUKE-1586A/2HC 120/C Super-DAQ Precision Temperature Scanner, 120 V	2 High-Capacity Modules, Accredited Calibration, software CD
FLUKE-1586A/2DS 120 Super-DAQ Precision Temperature Scanner, 120 V	2 DAQ-STAQ Multiplexers, software CD
FLUKE-1586A/2DS 120/C Super-DAQ Precision Temperature Scanner, 120 V	2 DAQ-STAQ Multiplexers, Accredited Calibration, software CD
FLUKE-1586-CASE 1586A Super-DAQ Carrying Case	Carrying case
FLUKE-1586/DS-CASE 1586A Super-DAQ/DAQ-STAQ Carrying Case	Carrying case
FLUKE-7526A Precision Process Calibrator	USB to serial adapter cable, thermocouple shorting jumper
FLUKE-7526A-CASE 7626A Carrying Case	Carrying case
FLUKE-1551A-9 Digital Thermometer, 9 in, –50 °C to 160 °C (-58 °F to 320 °F)	RS-232 cable, 3 AAA batteries
FLUKE-1551A-12 Digital Thermometer, 12 in, –50 °C to 160 °C (-58 °F to 320 °F)	RS-232 cable, 3 AAA batteries
FLUKE-1552A-12 Digital Thermometer, 12 in, -80 °C to 300 °C (-112 °F to 572 °F)	RS-232 cable, 3 AAA batteries
FLUKE-1551-CASE 1551/1552 Carrying Case	Carrying case

Automatic pressure calibration and documentation

for faster, more accurate results

Let the new Fluke 729 Automatic Pressure Calibrator change the way you calibrate.

- **Fast, easy setup with automatic pressure regulation**
- **Built-in HART communication**
- **Automatic, no-hassle calibration and documentation**

You'll have fast, accurate test results you can trust at the push of a button—all without hand pumping and manual adjustments.

Download your free pressure calibration application note at **fluke.com/729calibrator**

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NEW

Fluke 729 Automatic Pressure Calibrator

Portable automatic pressure calibrator simplifies pressure calibration

The Fluke 729 Automatic Pressure Calibrator has been designed specifically with process technicians in mind to simplify the pressure calibration process and provide faster, more accurate test results. Technicians know that calibrating pressure can be a time consuming task, but the 729 makes it easier than ever with an internal electric pump that provides automatic pressure generation and regulation in an in an easy-to-use, rugged, portable package.

The ideal portable pressure calibrator, the 729 allows you to simply type in a target pressure, and the calibrator will automatically pump to the desired set-point. Then, internal fine adjustment control automatically stabilizes the pressure at the requested value.

The Fluke 729 can also automatically test multiple pressure test points and automatically document the results. Calibration is as easy as typing in the starting and ending pressure and the number of test points and tolerance level. The 729 does the rest.

Built-in HART communication capabilities enable HART transmitter mA adjustments, light HART configuration and the ability to adjust to applied 0 % and 100 % values.

Upload and manage documented calibration results with DPCTrack2™ Calibration Management Software, making it easy to manage your instrumentation, create scheduled tests and reports, and manage calibration data.

With three ranges to choose from, 30 psi (2 bar, 200 kPa), 150 psi (10 bar, 1 MPa) and 300 psi (20 bar, 2 MPa), Fluke 729 Automatic Pressure Calibrators are designed to perform when and where you need them.

Key features

- Automatic pressure generation and regulation to 300 psi
- Easily document the process using onboard test templates
- Automatic internal fine-pressure adjustment
- Measure, source and simulate 4 to 20 mA signals
- 24V loop power for powering transmitters for tests
- Bright dual/triple-channel color graphical display
- HART communication for testing HART smart transmitters
- Built in leak testing for verifying test setups for leakage
- Rugged portable design with standard 3-year warranty
- Fluke Connect® App compatibility • Measure temperature with optional 720RTD probe
- Measure Vdc for testing 1 V dc to 5 V dc output transmitters
- Compatible with 700 Series and 750 Series pressure modules
- Upload documented test results to DPCTrack2™ Calibration Management Software
- Innovative semi-rigid carrying case designed for field work

Ordering information

Model	Description
FLUKE-729 30G 2 Bar Automatic Pressure Calibrator **FLUKE-729** 150G 10 Bar Automatic Pressure Calibrator **FLUKE-729** 300G 20 Bar Automatic Pressure Calibrator	soft case, stackable test leads, AC280 hookclips, alligator clips, test probes, magnetic hanger kit, carrying strap, quick start guide,safety sheet, power supply, rechargeable battery (installed), hose kit with push fit adapters, hanging clip, USB cable, 1/8 in FNPT to 1/4 in FNPT adapter, 1/8 in FNPT to F-M20 adapter, 1/8 in FNPT to 1/4 in FBSP adapter, PTFE tape, (2) sintered filters, water trap drain and valve tuning hoses.
FLUKE-729 30G FC 2 Bar Automatic Pressure Calibrator **FLUKE-729** 150G FC 10 Bar Automatic Pressure Calibrator **FLUKE-729** 300G FC 20 Bar Automatic Pressure Calibrator	soft case, stackable test leads, AC280 hook clips, alligator clips, test probes, magnetic,hanger kit, carrying strap, wireless adapter,quick start guide, safety sheet, power supply,rechargeable battery (installed), hose kit with push fit adapters, hanging clip, USB cable, 1/8 in FNPT to 1/4 in FNPT adapter,1/8 in FNPT to F-M20 adapter, 1/8 in FNPT to 1/4 in FBSP adapter, PTFE tape, (2) sintered filters, water trap drain and valve tuning hoses.

Fluke Pressure Calibrators

Fluke 719 and 719PRO Electric Pressure Calibrators

- Electric pump enables one-handed pressure pumping
- Best in class 0.025 % pressure measurement accuracy
- Programmable pump limit settings can eliminate over-pressurization
- Precision vernier for fine pressure adjustment
- Variable release rate bleed valve for controlled pressure release
- Pressure switch test makes a difficult task easy, captures set, reset and deadband values of a pressure switch
- Measure mA with 0.015 % accuracy, while sourcing 24 V loop power
- 719: Two ranges, 30 psi and 100 psi; 719PRO: Three ranges 30 psi, 150 psi and 300 psi; 719PRO: Precision temperature measurement with optional 720RTD Probe

Fluke 718 Pressure Calibrators

- 1, 30, 100 and 300 psi ranges available
- Pump to 300 psi, 20 bar with internal hand pump (718-300G)
- 718-1G includes special low volume pump and high measurement resolution for low pressure calibration
- Precision vernier for fine pressure adjustment
- Variable release rate bleed valve for controlled pressure release
- Pressure switch test makes a difficult task easy, captures set, reset and deadband values of a pressure switch
- Measure pressure to 0.025 % of full scale; Measure mA with 0.015 % accuracy, while sourcing 24 V loop power

Fluke 717 Pressure Calibrators

- Measure up to 10,000 psi/690 bar sensor (10000G model)
- Compatible with non-corrosive gases and liquids on 500 psi and higher ranges
- Pressure switch test makes a difficult task easy, captures set, reset and deadband values of a pressure switch
- Measure pressure to 0.025 % of full scale; Measure mA with 0.015 % accuracy, while sourcing 24 V loop power

Fluke 750P Series Pressure Modules

50 pressure modules covers pressure calibrations from 0 to 1 in H_2O to 10000 psi 2.5 mBar to 690 bar.

- 0.025 % reference uncertainty; 6-month and 1-year specifications
- Temperature compensated 0 °C to 50 °C
- Digital communication to calibrators, no analog losses or errors
- Gage, differential, dual range, absolute and vacuum measurement models

Ordering information

Models		Included accessories
FLUKE-719PRO 30G Electric Pressure Calibrator	FLUKE-717 15G Pressure Calibrator	Test leads, alligator clips, holster, test hose (719), one 9 V alkaline battery (two 9 V batteries in 718 and 719), 8 AA batteries in the 719PRO and safety sheet.
FLUKE-719PRO 150G Electric Pressure Calibrator	FLUKE-717 30G Pressure Calibrator	
FLUKE-719PRO 300G Electric Pressure Calibrator	FLUKE-717 100G Pressure Calibrator	
FLUKE-719 30G Electric Pressure Calibrator	FLUKE-717 300G Pressure Calibrator	
FLUKE-719 100G Electric Pressure Calibrator	FLUKE-717 500G Pressure Calibrator	
FLUKE-718 1G Pressure Calibrator	FLUKE-717 1000G Pressure Calibrator	
FLUKE-718 30US Pressure Calibrator	FLUKE-717 1500G Pressure Calibrator	
FLUKE-718 100US Pressure Calibrator	FLUKE-717 3000G Pressure Calibrator	
FLUKE-718 300G Pressure Calibrator	FLUKE-717 5000G Pressure Calibrator	
FLUKE-717 1G Pressure Calibrator	FLUKE-717 10000G Pressure Calibrator	

For a full list of Fluke 750P Series Pressure Calibrators, visit **www.fluke.com/pressure**.

Fluke 721 Precision Pressure Calibrator

Features dual-range isolated pressure sensors

- Ideal tool for gas custody transfer applications
- Take simultaneous static and differential pressure measurements with a single tool
- Best in class accuracy of 0.025 %, for gas measurement applications
- Pt100 RTD input for precision temperature measurement (probe optional)
- Measures 4 to 20 mA signals and provides 24 V loop power
- Measure up to 30 V dc to check 24 V loop power supplies
- Extend pressure measurement range with connection to external 750P Series Pressure Modules (50 ranges)
- I.S. rated models available. IS models do not have 24 V loop power, measure voltage or have connectivity to pressure modules

Specifications

Model	Low pressure sensor			High pressure sensor		
	Range sensor 1	Resolution sensor 1	Accuracy sensor 1	Range Sensor 2	Resolution sensor 2	Accuracy sensor 2
FLUKE-721-1601	-14 psi to +16 psi	0.001 psi	0.025 % of full scale	-12 psi to +100 psi	0.01 psi	0.025 % of full scale
FLUKE-721-1603				-12 psi to +300 psi	0.01 psi	
FLUKE-721-1605				-12 psi to +500 psi	0.01 psi	
FLUKE-721-1610				0 psi to +1000 psi	0.1 psi	
FLUKE-721-1615				0 psi to +1500 psi	0.1 psi	
FLUKE-721-1630				0 psi to +3000 psi	0.1 psi	
FLUKE-721-1650				0 psi to +5000 psi	0.1 psi	0.035 % of full scale
FLUKE-721-3601	-14 psi to +36 psi			-12 to +100 psi	0.01 psi	0.025 % of full scale
FLUKE-721-3603				-12 psi to +300 psi	0.01 psi	
FLUKE-721-3605				-12 psi to +500 psi	0.01 psi	
FLUKE-721-3610				0 psi to +1000 psi	0.1 psi	
FLUKE-721-3615				0 psi to +1500 psi	0.1 psi	
FLUKE-721-3630				0 psi to +3000 psi	0.1 psi	
FLUKE-721-3650				0 psi to +5000 psi	0.1 psi	0.035 % of full scale

Fluke 700G Series Precision Pressure Test Gauges

Twenty three ranges to choose from

- Seven Reference Class gauge ranges with ± .04 % of reading accuracy: 30 psi, 100 psi, 500 psi, 1000 psi, 3000 psi, 5000 psi, 10000 psi
- Two Low pressure measurement ranges with ± .1 of reading accuracy: 10 inH_2O, 1 psi
- Fourteen precision test gauge ranges with ± .05 % of reading accuracy: 15 psi, 30 psi, 100 psi, 300 psi, 500 psi, 1000 psi, 2000 psi, 3000 psi, 5000 psi, 10000 psi
- Four Absolute pressure measurement ranges: 15 psia, 30 psia, 100 psia, 300 psia
- CSA; Class 1, Div 2, Groups A–D rating; ATEX rating: II 3 G Ex nA IIB T6
- Combine with the 700PTPK or 700HTPK pump kits for a complete pressure testing solution for up to 600 psi (40 bar) with the 700PTP–1 pneumatic pump and up to 10,000 psi (690 bar) with the 700HTP–2 hydraulic pump
- Log up to 8,493 pressure measurements to memory (requires 700G/TRACK software)
- Three-year warranty

Ordering information

Models	Included accessories
FLUKE-721 Precision Pressure Calibrator (all models)	Soft case, Four (4) AA batteries, manual, traceable calibration certificate, test leads
FLUKE-700G/700RG Precision Pressure Test Gauges (all models)	Manual on CD-ROM in 14 languages, traceable certificate of calibration, 1/4 in NPT to 1/4 in ISO adapter

For a full list of Fluke 750P Series Pressure Modules, visit **www.fluke.com/pressure**.

Fluke 2700G Series Reference Pressure Gauges

Best-in-class measurement performance

The 2700G Reference Pressure Gauges provide best-in-class measurement performance in a rugged, easy-to-use, economical package. The 2700G is ideal for calibrating pressure gauges, transmitters, transducers, and switches. In addition, it can be used for data logging.

- Precision pressure measurement from 115 psi to 10,000 psi
- Accuracy to 0.02 % of full scale
- Combine with a Fluke PTP or HTP pump kit or P551X comparison test pump for a complete pressure testing solution

Ordering information

Models	Included accessories
FLUKE-2700G-BG100K Reference Pressure Gauge, -15 to 15 psi (-100 to 100 kPa)	Manual on CD-ROM in 14 languages, calibration certificate, ¼ NPT female to ¼ BSP male adapter, ¼ NPT female to M20X1.5 adapter, universal ac power supply, USB communication cable
FLUKE-2700G-BG200K Reference Pressure Gauge, -15 to 30 psi (-100 to 200 kPa)	
FLUKE-2700G-BG700K Reference Pressure Gauge, -12 to 100 psi (-80 to 700 kPa)	
FLUKE-2700G-BG2M Reference Pressure Gauge, -12 to 300 psi (-80 kPa to 2 MPa)	
FLUKE-2700G-BG3.5M Reference Pressure Gauge, -12 to 500 psi (-80 kPa to 3.5 MPa)	
FLUKE-2700G-BG7M Reference Pressure Gauge, -12 to 1000 psi (-80 kPa to 7 MPa)	
FLUKE-2700G-G20M Reference Pressure Gauge, 0 to 3000 psi (0 to 20 MPa)	
FLUKE-2700G-G35M Reference Pressure Gauge, 0 to 5000 psi (0 to 35 MPa)	
FLUKE-2700G-G70M Reference Pressure Gauge, 0 to 10 000 psi (0 to 70 MPa)	

Fluke P5500 Comparison Test Pumps

- Designed for testing pressure measuring instruments against master test instruments
- **P5510:** integrated pneumatic hand pump with pressure generation to 300 psi, vacuum to -12 psi
- **P5513:** pneumatic pressure adjustment to 3,000 psi with fine adjust inlet and outlet valves and precise screw press
- **P5514:** hydraulic pressure generation and adjustment to 10,000 psi with fine screw press and reservoir
- **P5515:** integrated hydraulic pressure generation and adjustment to 20,000 psi with high volume priming pump and fine screw press

Ordering information

Base model	Available ranges
FLUKE-P5510 Gas/Vacuum Comparison Test Pump	Generation and control from vacuum to 300 psi (2 MPa)
FLUKE-P5513 High Pressure Gas Comparison Test Pump	Ranges to 3000 psi (20 MPa)
FLUKE-P5514 Hydraulic Comparison Test Pump	Generation and control to 10 k psi (70 MPa)
FLUKE-P5515 Hydraulic Comparison Test Pump	Generation and control to 20 k psi (140 MPa)

Fluke 3130 Portable Pressure Calibrator

- Internal pump can generate vacuum to –12 psi or pressure to 300 psi
- Supply pressure connection allowing the use of external gas supply up to 300 psi
- Measure or generate 4 to 20 mA

Ordering information

Base model	Available ranges
FLUKE-3130-G2M Portable Pressure Calibrator	–12 to 300 psi (–80 kPa to 2 MPa)

Fluke P3000 Deadweight Testers

- Piston/cylinder design provides stability and repeatability
- Built-in pressure generation and control options for vacuum, gas and hydraulic models
- Test station design with O-rings eliminates the need for PTFE tape or wrenches

Ordering information

Base model	Available ranges
FLUKE-P301X and P302X Deadweight Tester, gas/vacuum, 1 or 2 pistons	Ranges from vacuum to 500 psi (3.5 MPa)
FLUKE-P303X Deadweight Tester, liquid lubricated gas, single piston	Ranges to 2000 psi (14 MPa)
FLUKE-P31XX Deadweight Tester, oil, 1 or 2 pistons	Ranges to 20,000 psi (140 MPa)
FLUKE-P32XX Deadweight Tester, water-operated, 1 or 2 pistons	Ranges to 10,000 psi (70 MPa)
FLUKE-P38XX Deadweight Tester, oil, single piston	Ranges to 60,000 psi (400 MPa)

FLUKE®

Thermometers

50 % blended heat map.

Fluke VT04/VT04A Visual IR Thermometer

Designed to see it all

See issues in context by blending the infrared heat map with a visual image, and get the detail you need by choosing one of five on-screen blending modes. See aligned images from as close as 15 cm (6 in) in near mode or from a distance in far mode. Plus, obtain accurate temperature readings without taking your eyes off the screen. The center measurement box shows the exact area of temperature measurement. Fill that center box with your target and rest assured you're not measuring the background.

- Identify intermittent problems by monitoring equipment over time or get alerts when a temperature is outside the expected range with temperature alarms and automated monitoring features
- Instantly identify the hottest and coldest spots within the field of view with hot and cold markers
- Handy when you need it; easily fits in your tool bag or pocket
- Intuitive enough to use right out of the box
- Easily access saved images with the removable SD card
- Save in .bmp format when you only want the image, or choose .is2 format so you can optimize images and create reports with Fluke SmartView® software, available by free download from Fluke.com

Fluke IR Windows CV400/401/300/301/200 CLKT100/75/50

Increase the safety and speed of your electrical infrared inspections

A company's greatest investment is not the equipment that's behind the panel door. It's the electricians, engineers and inspectors who risk their lives every day doing their jobs.

- Highest arc blast safety rating available—63 kA*
- Under 5 minute installation with 1 person; no need to remove panel door
- Clearly view equipment both visually and thermally with ClirVu® coating that protects the optic from the elements
- Corrosion and UV resistant for challenging outdoor environments—IP67 rugged*

* CV Series only

Fluke IR Windows enable you to inspect electrical equipment without opening panel doors.

Ordering information

Models	Included accessories
FLUKE-VT04A Visual IR Thermometer	Soft case, micro-SD card, micro-SD conversion adapter to standard, AA batteries (4), quick reference guide
FLUKE-VT04 Visual IR Thermometer	Hard case, micro-SD card, micro-SD conversion adapter to standard, lithium-ion rechargeable battery, micro USB charger/power supply (including worldwide adapters), quick reference guide

Ordering information

Models	Included accessories
FLUKE-CV400 4 in (95 mm) IR Window, Hand Turn Door Latch	Fluke IR Windows are supplied complete, assembled and ready for installation. In addition to the IR Window, each carton contains warranty statement and security key if that option is ordered.
FLUKE-CV401 4 in (95 mm) IR Window, Security Key Door Latch	
FLUKE-CV300 3 in (75 mm) IR Window, Hand Turn Door Latch	
FLUKE-CV301 3 in (75 mm) IR Window, Security Key Door Latch	
FLUKE-CV200 2 in (50 mm) IR Window, Hand Turn Door Latch	
FLUKE-100-CLKT 4 in (100mm) C-Range IR Window, Kwik Twist	Fluke IR Windows are supplied complete, assembled and ready for installation. In addition to the IR Window, each carton contains warranty statement
FLUKE-075-CLKT 3 in (75mm) C-Range IR Window, Kwik Twist	
FLUKE-050-CLKT 2 in (50mm) C-Range IR Window, Kwik Twist	

Fluke 64 MAX IR Thermometer

NEW

Takes the heat, the dust and water and a 3 meter drop. And now, internal memory and unattended monitoring.

The Fluke 64 MAX IR thermometer has the precision you need to do your job accurately and will not break your budget. Designed and tested to survive a 3 meter drop, you can count on this lightweight, compact infrared thermometer to work when you need it to work in the harshest environment and even when you're not able to be there.

- Precise laser technology for more accurate and repeatable measurements
- Temperature accuracy of up to ± 1°C or ± 1% of reading whichever is greater with 20:1 distance to spot ratio
- Flashlight and large, easy-to-read backlit LCD display for easy viewing even in dark environments
- IP54 rated for extra protection against airborne contaminants
- Get your tool to work when you can't – set time and desired interval between measurements and Auto Capture will capture spot temperatures unattended
- Displays the minimum, maximum or average temperature, or the difference between two measurements
- Hi and Lo alarms for rapid display of measurements outside set limits
- Small and lightweight design fits easily into your tool box
- Three year warranty

Specifications

Fluke 64MAX	
Temperature Range	– 30 °C to 600 °C (–22 °F to 1112 °F)
Accuracy (Calibration geometry with ambient temperature 23°C +/– 2°C)	± 1.0 °C or ± 1.0 % of reading, whichever is greater ± 2.0°C at –10 °C to 0 °C ± 3.0°C at –30 °C to –10 °C
Response Time (95%)	< 500 ms (95% of reading)
Spectral Response	8 to 14 microns
Emissivity	0.10 to 1.00
Optical Resolution	20 : 1 (calculated at 90% energy)
Display Resolution	0.1 °C
Repeatability (% of reading)	± 0.5 % of reading or ± 0.5 °C (whichever is greater)
Auto Capture	Set time and interval to capture up to 99 measurements
Internal memory	99 data point logging capability
Power	1 AA Battery
Battery Life	30 hours with laser and backlight on
Weight	255 g (8.99 oz)
Size	(175 x 85 x 75) mm (6.88 x 3.34 x 2.95) inches
Operating Temperature	0 °C to 50 °C
Storage Temperature	– 20 °C to 60 °C (without battery)
Operating Humidity	Non– condensing @ ≤ 10 °C (50°F) ≤ 90% RH @ 10 °C (50 °F) (to 30°C (86 °F) ≤ 75% RH @ 30 °C (86 °F) to 40°C (104 °F) ≤ 45% RH @ 40 °C 104°F to 50°C (122 °F)
Operating Altitude	2000 meters above mean sea level
Storage Altitude	12,000 meters above mean sea level
Drop test	3 meters
Implement Standard	Q/ASF01
Standards and Agency Approval	
Compliance	IEC 61010–1: Pollution Degree 2
Laser Safety	IEC 60825–1 Class 2, 650 nm, < 1 mW
Ingress Protection Rating	IP 54 per IEC 60529

Ordering information

Models	Included accessories
FLUKE-64 MAX IR Thermometer	Instruction sheet, battery

Fluke infrared thermometers: 62 MAX+, 62 MAX, 59 MAX+, 59 MAX

Take measurements from a safe distance

Fluke has built infrared thermometers with the durability and accuracy you need to do your job, and all within your budget. These IR Thermometers offer precise laser technology for accurate and repeatable measurements.

Fluke 62 MAX+ highlights:

- Three-meter drop tested
- 12:1 distance to spot ratio
- Min/Max/Avg/Dif, Hi and Lo alarms
- Dual lasers for superior targeting

Fluke 62 MAX highlights:

- Single laser targeting
- 10:1 distance to spot ratio

Fluke 59 MAX+ highlights:

- 10:1 distance to spot ratio
- Min/Max/Avg/Dif, Hi/Lo alarms

Fluke 59 MAX highlights:

- 8:1 distance to spot ratio
- Min/Max/Avg/Dif, Hi and Lo alarms

Specifications

	62 MAX+	62 MAX	59 MAX+	59 MAX
Temperature range	–30 °C to 650 °C (–22 °F to 1202 °F)	–30 °C to 500 °C (–22 °F to 932 °F)	–30 °C to 500 °C (–22 °F to 932 °F)	–30 °C to 350 °C (–22 °F to 662 °F)
Accuracy	± 1.0 °C or ± 1.0 % of reading, whichever is greater –10 °C to 0 °C: ± 2.0 –30 °C to –10 °C: ± 3.0	± 1.5 °C or ± 1.5 % of reading, whichever is greater –10 °C to 0 °C: ± 2.0 –30 °C to –10 °C: ± 3.0	0° C: ± 1.5 °C or ± 1.5 % of reading, whichever is greater	≥ 0 °C: ± 2.0 °C or ± 2.0 % of reading, whichever is greater
Emissivity	-	-	0.10 to 1.00	0.10 to 1.00
Power	AA battery			
Compliance	EN/IEC 61010-1: 2001			
Laser safety	FDA and EN 60825-1 Class II			

Fluke 572-2 Thermometer

- Extremely wide measurement range from –30 °C to 900 °C (–22 °F to 1652 °F)
- 60:1 distance to spot ratio with dual laser sighting

Fluke 50 Series II Thermometers

Lab accuracy in a field thermometer

- Laboratory accuracy: ± (0.05 % + 0.3 °C)
- Large backlit dual display, in °C, °F, or Kelvin (K)
- Min/Max/Avg
- Supports a wide range of thermocouple types

Powerful data logging capabilities

The Fluke 53 II B and 54 II B can log up to 500 points of data to internal memory.

- User-adjustable recording intervals
- Real-time clock captures the exact event time
- Download data to optional FlukeView® PC software

Ordering information

Models	Included accessories
FLUKE-62 MAX+ Infrared Thermometer, Dual Lasers	Instruction sheet, battery
FLUKE-62 MAX Infrared Thermometer, Single Laser	
FLUKE-59 MAX+ Infrared Thermometer	
FLUKE-59 MAX Infrared Thermometer	
FLUKE 572-2 High Temperature Infrared Thermometer	K-type thermocouple bead probe, durable hard case, USB 2.0 computer interface cable
FLUKE-54-2-B Datalogging Thermometer, Dual Input	Bead thermocouple(s), batteries, overview manual, instructional guide on CD
FLUKE-53-2-B Datalogging Thermometer, Single Input	
FLUKE-52-2 Digital Thermometer, Dual Input	Bead thermocouple(s), batteries, overview manual, instructional guide on CD
FLUKE-51-2 Digital Thermometer, Single Input	

Fluke 560 Series Infrared Thermometers

Stand up to tough industrial, electrical, HVAC, and mechanical environments

With a straight-forward user interface and soft-key menus, the Fluke 560 Series IR Thermometers make even complex measurements easy. With just a few pushes of a button you can easily adjust emissivity, record data, or turn on and off alarms.

- Measure up to 800 °C (1470 °F)
- Easily access advanced features with the soft-key buttons and graphical display
- Scan large areas or small objects; measure smaller objects from further away
- Compatibility with most type K thermocouples
- Confidently measure more surfaces, with adjustable emissivity and built-in materials table
- Log and download measurements for reporting (568)
- Audible and visual alarms alert you to measurements outside of set limits
- Pipe probe for superheat and sub-cooling; other contact and ambient measurements (561)
- Min/Max/Avg/Dif functions
- Includes KTC bead probe
- 1 % measurement accuracy

Specifications

	Fluke 561	Fluke 566	Fluke 568
Infrared temperature range	-40 °C to 535 °C (-40 °F to 995 °F)	-40 °C to 650 °C (-40 °F to 1202 °F)	-40 °C to 800 °C (-40 °F to 1472 °F)
Accuracy	Greater of ± 1 % or ± 1 °C (2 °F)		
Distance to Spot (D:S)	12:1	30:1	50:1
Sighting	Laser point		
Typical distance to target	Up to 2.5 m (7 ft)	Up to 4.5 m (15 ft)	Up to 7.5 m (25 ft)
Probe type	Thermocouple K		
Contact temperature range	-40 °C to 550 °C (-40 °F to 1022 °F)	-270 °C to 1372 °C (-454 °F to 2501 °F)	
Number of on-board memory locations		20	99
PC download and software			Yes, with FlukeView® Forms
Soft-key feature menu navigation		•	
Min/Max/Avg/Dif	Min/Max/Dif	Min/Max/Avg/Dif	
Material type adjustment (emissivity)	Hi/Med/Lo	Material table or 0.1 to 1.00 by 0.01	
High and low alarms		High and low alarms	
Hands-free logging			•
Battery	2 AA		
Warranty	Two-year		

Ordering information

Models	Included accessories
FLUKE-568 Infrared Thermometer	USB cable, FlukeView® Forms software, thermocouple type K bead probe, carrying case, two AA batteries, users manual, quickstart guide
FLUKE-566 Infrared Thermometer	Thermocouple type K bead probe, carrying case, two AA batteries, users manual and quickstart guide
FLUKE-561 Infrared Thermometer	Thermocouple type K pipe probe, carrying case, two AA batteries, users manual
FLUKE-61 Infrared Thermometer	9 V battery, instruction sheet
FLUKE-63 Infrared Thermometer	Wrist strap, carrying case, 9 V battery, users manual

The 568 allows for temperature measurement of small components.

Accessories

Soft cases

CAMO-C25 Camouflage Carrying Case
- High quality 1000D fabric
- Dimensions (HxWxD): 20.3 x 12.1 x 4.6 cm (8 x 4.8 x 1.8 in)

CAMO-C37 Camouflage Carrying Case
- High quality 1000D fabric
- Dimensions (HxWxD): 26.5 x 9 x 3 cm (10.5 x 3.5 x 1.2 in)

C75 Accessory Case
- Zippered carrying case
- Dimensions (HxWxD): 17.9 x 10.3 x 2.6 cm (7 x 4 x 1 in)

C50 Meter Case
- Case with inside pocket, belt loop and inside meter strap
- Dimensions (HxWxD): 19.2 x 9 x 3.8 cm (7.56 x 3.5 x 1.5 in)

C25 Large Soft Case for DMMs
- Case with padding and inside pocket
- Dimensions (HxWxD): 21.8 x 12.8 x 6.4 cm (8.6 x 5 x 2.52 in)

C90 Soft Case for DMMs
- Case with inside pocket and belt loop
- Dimensions (HxWxD): 20.5 x 9 x 7.2 cm (8 x 3.5 x 2.8 in)

C35 Soft Carrying Case
- Made of durable polyester 600D
- Dimensions (HxWxD): 22 x 14 x 6.5 cm (8.7 x 5.5 x 2.6 in)

C23 Soft Carrying Case
- Case with inside pocket and belt loop
- Dimensions (HxWxD): 22.5 x 9.5 x 5.8 cm (8.9 x 3.75 x 2.3 in)

C280 Soft Case
- Made of durable polyester 600D
- Dimensions (HxWxD): 23 x 18.5 x 6.5 cm (9 x 7.3 x 2.6 in)

C115 Soft Carrying Case
- Made of durable polyester 600D
- Dimensions (HxWxD): 24 x 20.5 x 7.5 cm (9.5 x 8 x 3 in)

C116 Soft Carrying Case
- Made of durable polyester 600D
- Dimensions (HxWxD): 24 x 23 x 6.5 cm (9.5 x 9 x 2.6 in)

C150 Soft Carrying Case
- High quality 1000D fabric
- Dimensions (HxWxD): 29.8 x 11.4 x 5.6 cm (11.75 x 4.5 x 2.2 in)

C781 Meter Case
- Made of durable polyester 600D
- Dimensions (HxWxD): 26.9 x 14.1 x 9 cm (10.6 x 5.6 x 3.5 in)

C33 Soft Carrying Case
- Case with inside pocket and belt loop
- Dimensions (HxWxD): 28 x 11.5 x 5.5 cm (11 x 4.5 x 2.2 in)

C789 Meter and Accessory Case
- Made of durable polyester 600D
- Dimensions (HxWxD): 30.8 x 25.6 x 7.7 cm (12 x 10 x 3 in)

C43 Soft Carrying Case
- Made of durable polyester 600D
- Dimensions (HxWxD): 31.8 x 23 x 9 cm (12.5 x 9.1 x 3.5 in)

C550 Tool Bag
- Made of ballistic cloth with heavy-duty hardware
- Dimensions (HxWxD): 33.3 x 51.3 x 23.1 cm (13 x 20.2 x 9.1 in)

C345 Soft Case
- Made of durable polyester 600D
- Dimensions (HxWxD): 36 x 20 x 24 cm (14 x 8 x 9.5 in)

Hard cases

CXT Series Extreme Cases
- Models CXT80, CXT170, and CXT280 for various meter compatibility
- Unbreakable, watertight, airtight, chemical resistant and corrosion proof

C101 Hard Case
- Dimensions (HxWxD): 30.5 x 36 x 10.5 cm (12 x 14.2 x 4.1 in)

C100 Universal Carrying Case
- Dimensions (HxWxD): 39.7 x 34.6 x 12.2 cm (15.7 x 13.6 x 4.8 in)

C1600 Gear Box
- Includes five hook and loop straps to wrap cords and test leads
- Dimensions (HxWxD): 26 x 39 x 20 cm (10 x 15 x 7.8 in)

CXT1000 Extreme Hard Case - New
- Rugged hard case that allows you to configure the diced foam interior and offers maximum protection
- Waterproof to a depth of 3 feet, airtight, and O-ring sealed for automatic pressure equalization
- Dimensions (HxWxD): 34.3 x 46.5 x 17.8 cm (13.5 x 18.3 x 7 in)

Leather cases

C520A Leather Tester Case
- Dimensions (HxWxD): 25.6 x 15.4 x 10.6 cm (10 x 6 x 4 in)

C510 Leather Meter Case
- Dimensions (HxWxD): 28.7 x 17.9 x 10.6 cm (11 x 7 x 4 in)

Holsters

H15 Electrical Tester Holster
- High quality 1000D fabric
- Dimensions (HxWxD): 27.9 x 9.2 x 5.1 cm (11 x 3.6 x 2 in)

H80M Protective Holster
- Includes a hanging magnet, general purpose hanger, and hook and loop straps
- Dimensions (HxWxD): 19 x 9.5 x 4.3 cm (7.5 x 3.7 x 1.7 in)

H5 Electrical Tester Holster
- Dimensions (HxWxD): 19.2 x 9 x 3.8 cm (7.5 x 3.5 x 1.5 in)

H3 Clamp Meter Holster
- Dimensions (HxWxD): 23.1 x 9 x 6.4 cm (9 x 3.5 x 2.5 in)

H6 IR Thermometer Holster
- Dimensions (HxWxD): 30.2 x 17.8 x 5.7 cm (11.9 x 7 x 2 in)

Fluke cases and holsters

A premium meter deserves a premium case

Cases and holsters selection guide

	113/114/115/116/117	27 II/28 II	77-4/175/177/179	83V/87V	233	287/289	8845A/8846A/8808A	120/190/22X Series	51-II/52-II/53-II B/54-II B	561/566/568	63/66/68	323/324/325	355	365/373/902	374 FC/375FC /376 FC/ 381	705/707	712/714/715/717/72X Series	718/719	753/754	787/789	T+/T+PRO	T5-600/T5-1000	1503/1507/1577/1587 FC
C12A	•															•							
C23	•		•	•	•							•											
Camo-C25	•	•	•	•	•	•			•			•					•			•	•		•
C25	•	•	•	•	•	•			•			•					•			•	•		•
C33												•		•	•						•	•	
C35			•		•																•	•	
Camo-C37												•		365	•						•		•
C43				•	•	•		•		•			•	•	•					•			
C50	•																				•		
C75	The C75 is designed to hold test leads, probes, clips and other required accessories																						
C90	•		•						•												•		
C100		•	•	•						•			•				71X			787			
C101	•	•	•	•	•	•		•	•		•	•		•	•	•	•	•		•		•	•
C115/C116	•	•	•	•	•	•		•						365			•	•		•			•
C125		•	•	83V	•																		
C150												•		•	•						•	•	
C280	•	•	•	•	•	•		•	•							•	•	•		•	•		
C345	The perfect case for carrying a wide range of Fluke handheld test tools and accessories																						
C510			•						•					•	•					787			
C520A																					•	•	
C550/C1600	The C550 and C1600 are large enough to hold accessories and multiple test tools																						
C781						•		•						•	•		72X	•	•	789			•
C789								•		•			•	365				•		•			
C799																			•				
C800			•	•						•			•	•	•		71X			787			
CXT80		•		•	•												72X			•			
CXT170	•		•						•								71X			•			•
CXT280						•														•			
CXT1000	The CXT1000 is designed to store, carry, and protect a wide range of Fluke test tools and accessories																						
H15																					•	•	

Fluke accessory sets and kits

Get an outstanding value with our most popular accessories

TL220 Industrial Test Lead Set
- Starter kit for industrial applications
- Includes 1 pair: AC220, TP220, TL224
- CAT II 1000 V, 10 A (TP220 only)
- CAT III 1000 V, CAT IV 600 V with protective cap

TL223 Electrical Test Lead Set
- Starter kit for electrical applications
- TP1 has flat blades for wall sockets
- Includes 1 pair: AC220, TP1, TL224
- CAT II 1000 V, 10 A (TP1 only)
- CAT III 1000 V, CAT IV 600 V with protective cap

TLK-220 SureGrip™ Accessory Kit with Meter Carrying Case
- Plunger style alligator clips
- Large jaw alligator clips
- Sharp test probes
- Right to straight test leads
- Zippered vinyl carry case with moveable divider
- Holds large DMMs

TLK287 Electronics Master Test Lead Set

The perfect test lead kit for today's electronics test and design.

- Precision electronic probes with multiple spring-loaded sharp tips to maximize contact with SMD test points
- Micro-grabbers and leads to enable fine SMD test
- Modular mini-alligator clips, grabbers, leads, probes, and couplers for virtually every electronics need

TLK289 Industrial Master Test Lead Set and Case

Designed for electrical and electronics test in today's industrial environment.

- SureGrip™ alligator clips, grabbers and hook clips for dependable contact with a variety of test points
- TP175 TwistGuard™ Test Probes
- Magnetic hanger for suspension of your DMM
- Temperature adapter with type K thermocouple for direct temperature measurement with your DMMs

TLK-225 SureGrip™ Master Accessory Kit
- TP175 TwistGuard™ Test Probes
- Plunger style alligator clips
- Plunger style hook clips
- Plunger style pincer clips
- Large jaw alligator clips
- Right to straight test leads
- Six-pocket storage pouch, keeps the entire set together

Test lead kits selection guide

	113/114/115/116/117	27 II/28 II/27	77 IV	175/177/179	83V/87V/233	287/289	434/435	8845A/8846A/8808A	120 Series	190 Series	225C	323/324/325	355	365/373	374 FC/375 FC/376 FC/381	902 FC	705/707	71X Series	724/725/726	753/754	787/789	T+/T*Pro	T5-600/T5-1000	1503/1507/1577/1587 FC
TLK287	•	•	•	•	•	•	•	•	•	•	•	•	•				•	•	•	•	•			•
TLK289	116	•	•		•	•		•	•	•	•			•	•	•				•				
TL220	•	•	•	•	•	•	•	•	•	•	•	•	•	•			•	•	•	•	•			•
TL223	•	•	•	•	•	•		•	•	•	•			•						•				
TL225	•	•	•	•	•	•	•	•	•	•	•	•	•				•	•	•	•	•			•
TL238	•	•	•	•	•	•	•	•	•	•	•	•	•				•	•	•	•	•			•
TL80A	•	•	•	•	•	•	•	•	•	•	•	•	•				•	•	•	•	•			•
TL81A	•	•	•	•	•	•	•	•	•	•	•	•	•				•	•	•	•	•			•
80K-8, 80K-15, 80K-40	dc only	•	•	•	•	•		•	•	•	•										•			

T5-Kit, Tester Starter Kit

Getting started kit for electricians who already own a Fluke T5 Tester.

- Test probes
- Large jaw alligator clips
- Zippered soft case

Fluke test leads, probes and clips

The best leads for all your measurement needs

For electronic applications

TL80A Basic Electronic Test Lead Set
- Six piece set with zippered case
- Probes, alligator clips and tip extenders for electronic applications
- CAT II 300 V
- CAT III 1000 V, CAT IV 600 V with protective cap

TL910 Electronic Test Probes with Replacement Tips

- Small profile provides accessibility
- Comes with five sets of replaceable tips
- Replacement tips: TP912
- CAT II 1000 V, 3 A

TP80 Electronic Test Probes

- Tapered tip ideal for probing electronic components or boards
- Removable guard for IC probing
- CAT III 1000 V, 10 A

TP920 Test Probe Adapter Kit

- IC test tip adapters, extended tips, medium alligator clips fit over TL71 and TL75 test lead sets
- IC test tip Adapter, 3 A
- Extended probe tip, 3 A
- Med. alligator clip, 5 A
- CAT II 300 V

TL40 Retractable Probe Assembly

- Retractable, insulated sharp probe tip
- CAT II 600 V, 3 A

TL26A Telecom Test Lead Set

- Five-way multipoint test clips for telecommunications applications
- Flexible silicone insulated leads are heat and cold resistant
- Rated 30 V, 8 A

For automotive applications

TP81 and TP82

- Stainless steel probe pierces insulation on 0.75 mm² to 2.00 mm² wire
- Design provides complete insulation while working on fuel injectors or sensors
- TP81 for use with modular test leads (Fluke TL224)
- TP82 slips over probe tips (Fluke TL71)
- Rated to 60 V dc

TP88 Rigid Backprobe Pin Set

- 51 mm (2 inch) long pins pass between the weather pack seal and wire
- Use with Fluke TL71 or TL75 test lead sets
- Rated to 60 V dc

TLK281 Automotive Test Lead Kit

- Insulation piercing probes
- SureGrip™ silicone test leads
- SureGrip test probes
- SureGrip plunger style alligator clips
- SureGrip alligator clips
- Carrying case

TLK282 Deluxe Automotive Test Lead Kit

- Insulation piercing probes
- Set of five automotive back probe pins
- SureGrip silicone test leads
- SureGrip test probes
- SureGrip plunger style alligator clips
- SureGrip alligator clips
- SureGrip hook clips
- Carrying case

TP40 Automotive Back Probe Pin Set

- Set of five 38 mm (1.5 inch) pins
- Rated to 60 V dc
- Provide an easy connection past weather pack seals to connector conductors
- Use with Fluke TL71 or TL75 test lead sets

TL82 Automotive Pin & Socket Adapter Set

- Collection of male and female adapters allows you to make firm connection to pin and socket connectors
- Adapters with flexible tips come in the following sizes: 0.3 mm² to 3.3 mm²
- Rated to 60 V dc

High-voltage probes

80K-6, 80K-15, 80K-40 High Voltage Probes

- Allows a digital multimeter to measure up to 6,000 volts peak, 15,000 volts peak and 40,000 volts peak respectively
- 1000:1 division ratio output when connected to 10 MΩ multimeter
- Ground clip included
- Intended for low energy applications that are referenced to ground
- 80K-15 (not available in Europe)

Note: intended for low energy applications only

Fluke SureGrip™ accessories

As tough as your meter

Modular test leads and test probes (use test probes with test leads)

TP175, TwistGuard™ Test Probes
- Converts probe tip length between 4 mm, a CAT III 1000 V, CAT IV 600 V measurement and 19 mm, a CAT II 1000 V measurement
- Fits standard modular test leads

FTPL-1 SureGrip™ Fused Test Probes with Leads
- FTP-1 Fused Test Probes with built-in fuses for added protection
- TL224 Silicone Insulated Test Leads
- CAT III 1000 V, CAT IV 600 V, 10 A

TL221 SureGrip™ Silicone Test Lead Extension Kit
- Superior strain relief
- Includes two adapters to extend leads 1.5 m
- CAT III 1000 V, CAT IV 600 V, 10 A

TL222 SureGrip™ Silicone Insulated Test Leads
- Superior strain relief
- Recommended for use with AC220, AC280, AC283 test clips
- CAT III 1000 V, CAT IV 600 V, 10 A

TL224 SureGrip™ Silicone Insulated Test Leads
- Superior strain relief
- 1.5 m silicone-insulated wire resists heat and cold
- CAT III 1000 V, CAT IV 600 V, 10 A

FTP-1 SureGrip™ Fused Test Probes
- Built-in fuses for added protection
- 2 mm threaded probe tips include removable 4 mm lantern-style spring contacts
- Removable GS38 insulated caps
- CAT III 1000 V, CAT IV 600 V, 10 A

TP1, TP2, TP4 and TP38 Slim Reach™ Test Probes
- Slender probe bodies for probing closely spaced or recessed points
- TP1 has a flat blade
- TP2 has 2 mm diameter tip
- TP4 has 4 mm diameter tip
- TP38 has stainless steel insulated probe to help lessen the risk of arc flash explosion
- CAT II 1000 V, 10 A
- CAT III 1000 V, CAT IV 600 V with protective cap (TP1 and TP2 only)
- CAT III 1000 V, CAT IV 600 V (TP38 only)

TP220 SureGrip™ Industrial Test Probes
- Sharp, 13 mm (.5 inch) stainless steel tip provides reliable contact
- Flexible finger barrier improves grip
- CAT II 1000 V, 10 A
- CAT III 1000 V, CAT IV 600 V with protective cap

Modular clips (use with test leads, includes one red, one black)

AC220 SureGrip™ Alligator Clips
- Insulated, nickel plated jaws grip objects up to 10 mm (.375 in)
- Blunt tip grabs round screw heads
- CAT III 1000 V, CAT IV 600 V, 10 A

AC280 SureGrip™ Hook Clips
- Profile narrows to 5.5 mm (.22 inch) at tip
- Hook opening 5 mm (.20 inch) at front, 2 mm (.08 inch) at base
- CAT III 1000 V, CAT IV 600 V, 3 A

AC283 SureGrip™ Pincer Clips
- 11.4 cm (4.5 inch) flexible, insulated shaft
- Nickel plated pincers open to 5 mm (.20 in)
- CAT III 1000 V, CAT IV 600 V, 1 A

AC285 SureGrip™ Alligator Clips
- Multi-purpose tooth pattern grips anything from fine gauge wire to a 19 mm (.75 in) nut
- Nickel-plated steel jaws
- Accepts standard modular 4 mm test leads
- CAT III 1000 V, CAT IV 600 V, 10 A

AC175 Threaded Alligator Clips
- Threads securely onto TL175 or TP175 probes
- Insulated alligator clips with flexible boots
- Jaw opening: 7 mm (0.275 in), jaw contact material: nickel-plated steel
- CAT III 1000 V, CAT IV 600 V

AC173 Extended Tooth Alligator Clips
- Extended tooth jaw with front placement for attaching to screw heads
- Accepts standard 4 mm modular test leads
- Jaw opening: 8 mm (0.31 in), jaw contact material: nickel-plated steel
- CAT III 1000 V, CAT IV 600 V

The new standard for safety

TL175 TwistGuard™ Test Leads

- Probes meet new EN 61010-031 requirements for safety
- Patented extendable tip guard meets new CAT III 1000 V, CAT IV 600 V requirements while providing the flexibility you need for CAT II measurements
- **New** WearGuard™ test lead wear indicator that changes color when leads are damaged and in need of replacement

- Probes always show correct category rating for tip being used
- Advanced strain relief exceeds 5,000 bend life
- TP175 probes fit modular test leads

TL238 SureGrip™ Test Lead Set for high energy environments
- Insulated tip probes help lessen risk of arc flash explosion
- Probe extenders keep hands away from live current
- Includes one pair each, insulated test tip probes, probe extenders and TL224 Test Leads
- Probes and leads CAT III 1000 V, CAT IV 600 V, 10 A, extenders CAT III 1000 V 10 A

TL71 Premium DMM Test Lead Set
- Flexible silicone insulated leads are heat and cold resistant
- Distinctive comfort grip probes
- Recommended for µV measurements
- CAT II 1000 V, 10 A
- CAT III 1000 V, CAT IV 600 V with protective cap

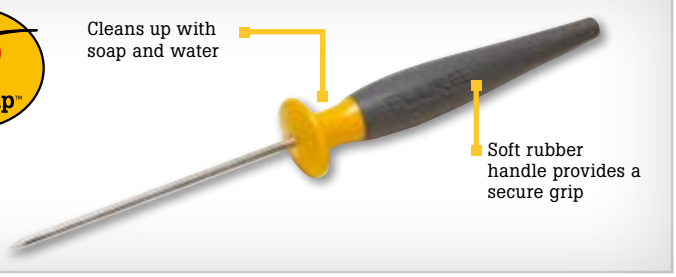
TL75 Hard Point Test Lead Set
- Extremely hard alloy tips resist wear
- Distinctive comfort grip probes
- 1.5 m PVC leads
- CAT II 1000 V, 10 A
- CAT III 1000 V, CAT IV 600 V with protective cap

Fluke temperature accessories

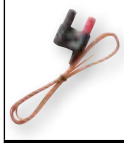
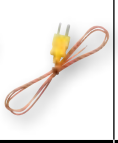
Hot probes with cool designs

SureGrip™ temperature accessories

The innovative SureGrip™ design from Fluke is now available in select temperature probes. The soft rubber handle combined with a new ergonomic shape is so comfortable to hold that you'll forget about the probe and focus on the measurement. All SureGrip probes have an improved, more flexible strain relief for a long life.



Specifications

	Bead	Bead	HVAC	Immersion	Surface	Air	Piercing	General purpose	Industrial surface
									
	80BK-A	80PK-1 80PJ-1	80PK-11	80PK-22	80PK-3A	80PK-24	80PK-25 80PT-25	80PK-26	80PK-27
Lowest temperature	-40 °C (-40 °F)		-30 °C (-22 °F)	-40 °C (-40 °F)	0 °C (32 °F)	-40 °C (-40 °F)	K Type: -40 °C (-40 °F) T Type: -196 °C (-321 °F)	-40 °C (-40 °F)	-127 °C (-196 °F)
Highest temperature	260 °C (500 °F)		105 °C (221 °F)	1090 °C (1994 °F)	260 °C (500 °F)	816 °C (1500 °F)	350 °C (662 °F)	816 °C (1500 °F)	600 °C (1112 °F)
Probe material	Type K wire with teflon insulation		Velcro	Inconel 600	Type K sensor with teflon body	Inconel	316 Stainless Steel	304 Stainless Steel	
Probe length	1 m lead wire		19 in Velcro cuff	21.27 cm (8.375 in)	9.525 cm (3.75 in)	21.59 cm (8.5 in)	10.16 cm (4 in)	21.57 cm (8.5 in)	20.32 cm (8 in)
Cable length	1 m (3.3 ft)				1.3 m (4 ft)	1 m (3.3 ft)			
Connection	Standard banana jack	Molded thermocouple plug							
SureGrip handle				•		•	•	•	•
Key feature	Ideal for initial troubleshooting. Can be secured in place with a magnet.		Velcro probe allows hands free temperature measurement.	For use in liquids or in gels.	Exposed junction for direct contact with flat or slightly convex surfaces.	Perforated baffle for air and non-caustic gas measurements.	Probe material safe for use in foods. Sharp tip pierces solid surfaces.	Use for general purpose air or surface measurements.	Low conductivity stainless steel minimizes thermal shunting. Extra rugged.
Thermocouple types	K	K, J	K	K			K, T	K	
Typical use									
General purpose	•	•	•	•	•	•	•	•	•
HVAC		•	•	•	•	•		•	•
Food service				•			•		
Industrial	•	•	•						•
Residential	•	•			•	•	•		
Commercial	•	•	•	•	•	•	•	•	•

The 80TK enables your meter to read temperature using mV.
For the Fluke Thermometer, 51, 52, 53, and 54 III, no adapter is necessary for thermocouple types K, J, T and E.

Temperature accessories selection guide

	113/114/115/116/117	175/177	179	233	3000 FC DMM	287/289	27-II/28-II	8845A/8846A/8808A	77 IV	83 V	87 V/88V	43B	120 Series	190 Series II	1577	1587 FC	51/52/53/54-II	561	566/568/572-2	705/707	714	715	724/725	753/754	787/789
Contact Probes																									
80PK-1/80PK-27	1	1	2	2	2	2	2	1	1	1	2	1	1	1	1	2	•	•	•	1	•	1	•	•	1
80PJ-1/80PJ-9																	•				•		•	•	
80PT-25																	•				•		•	•	
DMM Probes																									
80AK-A	•3		•	•		•	•5				•					•	•								
80BK-A	•3		•	•		•	•5				•					•									
80TK	•						•6	•	•	•		•	•	•	•					•		•		•	•
80T-150UA	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		•			•		•		•	•
Miscellaneous																									
80CK-M	1	1	2	2	2	2	2	1	1	1	2	1	1	1	1	2	•	•	•	1	•	1	•	•	1
80CJ-M																	•				•		•	•	
80PK-EXT (4)	1	1	2	2	2	2	2	1	1	1	2	1	1	1	1	2	•	•	•	1	•	1	•	•	1
80PJ-EXT																	•				•		•	•	
80PT-EXT																	•				•		•	•	
80PT-EXT																	•				•		•	•	

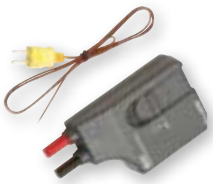
1-Requires 80TK 2-Requires 80AK 3-Fluke 116 Only 4-Also requires 80CK-M 5-28 II only 6-27 II only

Fluke temperature accessories

Turn your digital multimeter into a thermometer

Other temperature accessories

80TK Thermocouple Module



- Converts type K thermocouple signals into mV output
- Connects to DMM via standard banana plugs
- Switch selectable °C or °F
- Range: –50 °C to 1000 °C (–58 °F to 1832 °F)
- Includes 80PK–1 probe

80T–150UA Universal Solid State Temperature Probe

- For measurement of air, surface and non–corrosive materials
- Measurement range: –50 °C to 150 °C (–58 °F to 302 °F)
- Output: 1 mV/°C or 1 mV/°F (switch selectable)
- Connects to DMM via standard banana plugs

80PK–8, 80PK–10, Pipe Clamp Temperature Probes

- Type K thermocouples clamp securely onto pipes for fast temperature and superheat measurements
- Durable ribbon sensors
- 1 m (39 in) lead
- Measure from –29 °C to 149 °C
- 80PK–8 for 6.4 mm to 34.9 mm (0.25 in to 1.375 in)
- 80PK–10 for 32 mm to 64 mm (1.25 in to 2.5 in)

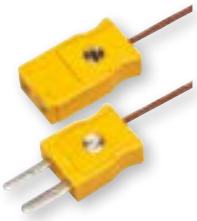
80PK–18, Pipe Clamp Temperature Probe Kit

- Includes both 80PK–8 and 80PK–10 Type K clamps
- Provides full range of pipe measurement sizes
- Includes soft carrying case to conveniently keep both clamps handy for any situation

80CK–M and 80CJ–M Type K and J Male Mini–Connectors

- Isothermal screw terminal for K or J wire
- Suitable for up to 20 gauge thermocouple wire
- Color coded to industry standards (K–yellow, J–black)
- Two per package

80PJ–EXT, 80PK–EXT, 80PT–EXT Thermocouple Wire Extension Kits



For extending and repairing type J, K or T thermocouple wires.

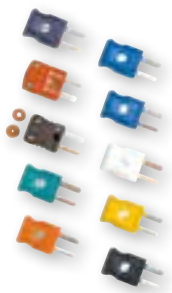
- Kit includes 3 m (9 ft) of thermocouple wire and 1 pair of male/female mini–connectors
- Maximum continuous exposure temperature: 260 °C (500 °F)
- 80PK–EXT is compatible with type K thermometers; 80PJ–EXT is designed for type J thermometers, and 80PT–EXT is designed for type T thermometers

Thermocouple Plug Kits

700TC1

A kit of ten mini–plug connectors. One each of the following:

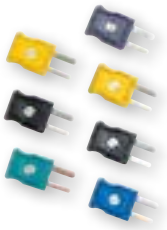
Type J (black)
Type K (yellow)
Type T (blue)
Type E (purple)
Type R/S (green)
Type B or Cu (white)
Type L (J–DIN) (blue)
Type U (T–DIN) (brown)
Type C (red)
Type N (orange)



700TC2

A kit of seven mini–plug connectors.

Type J (black), two
Type K (yellow), two
Type E (purple), one
Type T (blue), one
Type R/S (green), one



Process tools accessories

BP7240

- Li–ion rechargeable battery; nominal 7.2 volt, 4400 mA hr
- Use with 750 Series Calibrators

BP7235

- NiMH rechargeable battery; nominal 7.2 volt, 3500 mA hr
- Use in 700 and 740 Series Calibrators

700LTP–1 Low Pressure Test Pump

Hand operated pressure pump designed to generate either vacuum to –13 psi/ –.90 bar or pressures to 100 psi/6.9 bar. Ideal for low pressure applications requiring accurate low pressure testing.

700ILF In–line Filter

The Fluke 700ILF can be used to isolate the calibrator from incidental contact with fluids. Particularly useful with the 718 calibrator to help keep moisture or oils from contaminating the on–board pump.

700PTP–1 Pneumatic Test Pump

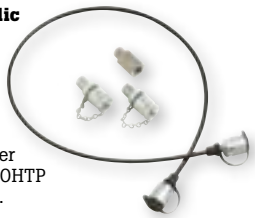
The Fluke 700PTP is a handheld pressure pump designed to generate either vacuum to –11.6 psi/–0.8 bar or pressure to 600 psi/40 bar.

700HTP–2 Hydraulic Test Pump

The Fluke 700HTP is designed to generate pressures up to 10,000 psi/ 700 bar. Use the Fluke 700PRV adjustable relief valves to limit pressures from 94 bar (1360 psi) to 376 bar (5450 psi)

700HTH–1 Hydraulic Test Hose

The 700HTH is a 10,000 psi, 700 bar test hose that connects to a calibration unit under test from a Fluke 700HTP hydraulic test pump.



700PMP Pressure Pump

The 700PMP is a hand–operated pressure pump to provide pressures up to 150 psi/1000 kPa. Output fitting is 1/8 FNPT.

Fluke 700–IV Current Shunt

Conversion factor: 10 mV = 1 mA

Accuracy (% of input, one–year): 0.025 %

Input current: 0 mA to 55 mA

Input resistance: 250 Ω nominal

Output resistance: 10 Ω nominal

Accuracy specification applies from +18 °C and 28 °C to 50 °C

Maximum input voltage: 30 V dc

Fluke ac current clamps

i200

i400

i800

i3000s

i200s

i400s

i1000s

i2000/i3000s/i6000s Flex

i2000 Flex, i3000s Flex-24 (24 in dia), i3000s Flex-36 (36 in dia), i6000s Flex-24 (24 in dia), i6000s Flex-36 (36 in dia)

AC current clamp specifications

	i200	i200s	i400	i400s	i800	i1000s	i3000s	i2000 Flex	i3000s Flex	i6000s
AC current range	1 A to 200 A	1 A to 200 A	1 A to 400 A	0.5 A to 400 A	1 A to 800 A	0.2 A to 1000 A	1 A to 3000 A	2 A to 2000 A	3 A to 3000 A	60 A to 6000 A
Accuracy	≤ 3 % + 0.5 A 48 Hz to 65 Hz	≤ 1 % + 0.5 A 48 Hz to 65 Hz	2 % + 0.06 A 45 Hz to 400 Hz	.5 A to 40 A, 2 % + .015 A, 5 A to 400 A, 2 % + .04 A, 45 Hz to 400 Hz	0.1 A to 10 A ± 3 % + .01 A, 10 A to 200 A ± 2 %, 200 A to 800 A ± 1 %	0.2 to 10 A: 3 % + 0.1 A 10 A to 100 A: 2 % + 0.5 A 100 A to 1000 A: 1 % + 1 A 48 Hz to 65 Hz	1 to 30 A: 2 % + 0.1 A 1 to 300 A: 2 % + 0.5 A 1 to 3000 A: 2 % + 2 A 48 Hz to 65 Hz	± 1 % of range 45 Hz to 65 Hz Ranges: 20 A, 200 A, 2000 A	± 1 % of range, 45 Hz to 65 Hz Ranges: 30 A, 300 A, 3000 A	± 1 % of range 45 Hz to 65 Hz
Bandwidth (–3 dB)	40 Hz to 40 kHz	40 Hz to 40 kHz	5 kHz to 20 kHz	5 Hz to 10 kHz	30 Hz to 10 kHz (typical)	5 Hz to 100 kHz	10 Hz to 100 kHz	10 Hz to 20 kHz	10 Hz to 50 kHz	10 Hz to 50 kHz, (– 3 dB)
Maximum conductor diameter	20 mm (0.8 in)	20 mm (0.8 in)	32 mm (1.25 in)	32 mm (1.25 in)	54 mm (2.13 in)	54 mm (2.13 in)	64 x 100 mm (2.52 x 3.94 in)	177 mm (7 in)	177 mm (7 in) or 265 mm (10.4 in)	193 mm (7.6 in) or 289 mm (11.4 in)
Maximum conductor size	150 mm²	150 mm²	400 mm²	400 mm²	2x 240 mm² or 1x 500 mm²	2x 240 mm² or 1x 500 mm²	64 mm (2.52 in)	610 mm (24 in) circumference	610 mm or 915 mm circumference	610 mm (24 in) or 915mm (36 in)
Output levels	1 mA/A	10 mV/A 100 mV/A	1 mA/A	10 mV/A 1 mV/A	1 mA/A	1 mV/A 10 mV/A 100 mV/A	10 mV/A 1 mV/A 0.1 mV/A	100 mV/A 10 mV/A 1 mV/A	100 mV/A 10 mV/A 1 mV/A	50 mV/A 5 mV/A 0.5 mV/A
Output cable	1.5 m shrouded banana plugs	2 m to BNC termination	1.5 m shrouded banana plugs	2.5 m to BNC termination	1.6 m shrouded banana plugs	1.6 m to BNC termination	2.1 m to BNC termination	2 m with double shrouded banana plugs	2.1 m to BNC termination	2 m to BNC, 4 mm plug adapter supplied
Warranty	One-year	One-year	One-year	One-year	One-year	One-year	One-year	One-year	One-year	One-year
Safety rating	CAT III 600 V	CAT III 600 V	CAT III 1000 V CAT IV 600 V	CAT III 1000 V CAT IV 600 V	CAT III 600 V	CAT III 600 V	CAT III 600 V	CAT III 600 V	CAT III 600 V	CAT III 600 V

AC current clamp selection guide

	i200	i200s	i400	i400s	i800	i1000s	i3000s	i2000 Flex[1]	i3000s Flex
114/116		1 A to 200 A		0.6 A to 400 A*		0.6 A to 1000 A*	1 A to 3000 A	2 A to 2000 A	3 A to 3000 A
115/117	60 A to 200 A	1 A to 200 A	60 A to 400 A	0.6 A to 400 A*	60 A to 800 A	0.6 A to 1000 A*	1 A to 3000 A	2 A to 2000 A	3 A to 3000 A
233	60 A to 200 A	1 A to 200 A	60 A to 400 A	0.6 A to 400 A*	60 A to 800 A	0.6 A to 1000 A*	1 A to 3000 A	2 A to 2000 A	3 A to 3000 A
27II	2 A to 200 A	1 A to 200 A	2 A to 400 A	1 A to 400 A*	2 A to 800 A	0.1 A to 1000 A*	1 A to 3000 A	2 A to 2000 A	3 A to 3000 A
28II	1.8 A to 200 A	1 A to 200 A	1.8 A to 400 A	1.8 A to 400 A	1.8 A to 800 A	0.2 A to 1000 A*	2 A to 3000 A	2 A to 2000 A	3 A to 3000 A
77 IV		1 A to 200 A		1 A to 400 A*		0.1 A to 1000 A*	1 A to 3000 A	2 A to 2000 A	3 A to 3000 A
175/177/179	3 A to 200 A	1 A to 200 A	3 A to 400 A	1 A to 400 A*	3 A to 800 A	0.3 A to 1000 A*	3 A to 3000 A	2 A to 2000 A	3 A to 3000 A
1577/1587 Insulation Meter	3 A to 200 A	1 A to 200 A	3 A to 400 A	3 A to 400 A*	3 A to 400 A	0.3 A to 1000 A*	3 A to 3000 A	2 A to 2000 A	3 A to 3000 A
83V/88V	2 A to 200 A	1 A to 200 A	2 A to 400 A	1 A to 400 A*	2 A to 800 A	0.1 A to 1000 A*	1 A to 3000 A	2 A to 2000 A	3 A to 3000 A
87V	2 A to 200 A	1 A to 200 A	2 A to 400 A	2 A to 400 A*	2 A to 800 A	0.2 A to 1000 A*	2 A to 3000 A	2 A to 2000 A	3 A to 3000 A
287/289	1 A to 200 A	1 A to 200 A	1 A to 400 A	0.5 A to 400 A*	1 A to 800 A	0.2 A to 1000 A*	1 A to 3000 A	2 A to 2000 A	3 A to 3000 A
43B Power Quality Analyzer		1 A to 200 A		0.35 A to 400 A		0.1 A to 1000 A	1 A to 3000 A	2 A to 2000 A	3 A to 3000 A
434/435 Power Quality Analyzer		1 A to 200 A		1.2 A to 400 A		0.3 A to 1000 A	1.2 A to 3000 A	i430Flex-TF-II	i430Flex-TF-II
120 Series ScopeMeters		1 A to 200 A		2.5 A to 400 A		0.25 A to 1000 A	2.5 A to 3000 A	2 A to 2000 A	3 A to 3000 A
190 Series ScopeMeters		1 A to 200 A		1 A to 400 A		0.1 A to 1000 A	1 A to 3000 A	2 A to 2000 A	3 A to 3000 A
8808A	1 A to 200 A	1 A to 200 A	1 A to 400 A	0.5 A to 400 A*	1 A to 800 A	0.1 A to 1000 A*	1 A to 3000 A	2 A to 2000 A*	3 A to 3000 A*
8845A/8846A	1 A to 200 A	1 A to 200 A	1 A to 400 A	1 A to 400 A*	1 A to 800 A	0.2 A to 1000 A*	1 A to 3000 A	2 A to 2000 A*	3 A to 3000 A*
787/789 Process Meters	50 A to 200 A	1 A to 200 A	50 A to 400 A	2 A to 400 A*	50 A to 440 A	0.2 A to 1000 A*	2 A to 3000 A	2 A to 2000 A	3 A to 3000 A

* Requires PM9081/001 Adapters.

[1] Three range version.

[2] Current and watt readings will be multiples of 10 higher or lower than actual on some ranges.

Fluke ac/dc current clamps

80i-110s

i1010

i310s, i30s and i30 Hall Effect AC/DC Current Clamps
Especially useful for low current measurements down to 30 milliamps.

i30s

i410

i310s

i30

AC/DC current clamp specifications

	80i-110s	i410	i1010	i30	i30s	i310s
DC range	0.1 A to 100 A	1 A to 400 A	1 A to 1000 A	30 mA to 30 A	30 mA to 30 A	0.1 A to 450 A
AC range	0.1 A to 70 A	1 A to 400 A	1 A to 600 A	30 mA to 20 A rms	30 mA to 20 A rms	0.1 A to 300 A
Accuracy	0.1 A to 10 A; dc to 1 kHz: ± 3 % + 50 mA; up to 100 A add 15 %; up to 20 kHz add 12 %	3.5 % + 0.5 A for dc or ac (45 to 400 Hz)	2 % + 0.5 A for dc or ac (45 to 400 Hz)	± 1 % of reading, ± 2 mA	± 1 % of reading, ± 2 mA	30 A range: 1 % + 50 mA 300 A range: 1 % + 300 mA
Bandwidth (–3 dB)	100 kHZ	3 kHz	10 kHz	dc to 20 kHz (–0.5 dB)	dc to 100 kHz (–0.5 dB)	dc to 20 kHz
Zero error adjustment	•	•	•	•	•	•
Maximum conductor diameter	11.8 mm (0.46 in)	30 mm (1.18 in)	30 mm (1.18 in)	19 mm (0.75 in)	19 mm (0.75 in)	19 mm (0.75 in)
Maximum conductor size	35 mm²	1x 400 mm² or 2x 240 mm²	1x 400 mm² or 2x 240 mm²	120 mm²	120 mm²	120 mm²
Output levels	10 mV/A, 100 mV/A	1 mV/A	1 mV/A	100 mV/A	100 mV/A	1 mV/A, 10 mV/A
Output cable	1.6 meter with BNC termination	1.2 meter with shrouded banana plugs	1.2 meter with shrouded banana plugs	1.5 meter with shrouded dual banana plugs	2 meter with BNC termination	2 meters with BNC termination and a BNC to safety shrouded banana adapter
Battery life	40 hours	60 hours	60 hours	30 hours	30 hours	30 hours
Warranty	One-year	One-year	One-year	One-year	One-year	One-year
Safety	CAT II 600 V; CAT III 300 V	CAT III 600 V	CAT III 600 V	CAT III 300 V	CAT III 300 V	CAT III 300 V

AC/DC current clamp selection guide

	80i-110s	i410	i1010	i30	i30s	i310s
114/115/116/117	0.1 A to 100 A dc/ 0.1 A to 70 A ac*	1.4 A to 400 A dc/ 6 A to 400 A ac	1.4 A to 1000 A dc/ 6 A to 600 A ac	30 mA to 30 A dc/ 60 mA to 20 A ac	30 mA to 30 A dc/ 60 mA to 20 A ac	0.1 A to 450 A dc/ 0.6 A to 300 A ac
233	0.1 A to 100 A dc/ 0.1 A to 70 A ac*	1.4 A to 400 A dc/ 6 A to 400 A ac	1.4 A to 1000 A dc/ 6 A to 600 A ac	30 mA to 30 A dc/ 60 mA to 20 A ac	30 mA to 30 A dc/ 60 mA to 20 A ac	0.1 A to 450 A dc/ 0.6 A to 300 A ac
27II	0.1 A to 100 A dc/ 0.1 A to 70 A ac*	1 A to 400 A dc/ 1 A to 400 A ac	1 A to 1000 A dc/ 1 A to 600 A ac	30 mA to 30 A dc/ 30 mA to 20 A ac	30 mA to 30 A dc/ 30 mA to 20 A ac	0.1 A to 450 A dc/ 0.1 A to 300 A ac
28II	0.1 A to 100 A dc/ 0.2 A to 70 A ac*	1 A to 400 A dc/ 6 A to 400 A ac	1 A to 1000 A dc/ 6 A to 600 A ac	30 mA to 30 A dc/ 60 mA to 20 A ac	30 mA to 30 A dc/ 60 mA to 20 A ac	0.1 A to 450 A dc/ 2 A to 300 A ac
77-IV	0.1 A to 100 A dc/ 0.1 A to 70 A ac*	1 A to 400 A dc/ 5 A to 400 A ac	1 A to 1000 A dc/ 5 A to 600 A ac	30 mA to 30 A dc/ 40 mA to 20 A ac	30 mA to 30 A dc/ 40 mA to 20 A ac	0.1 A to 450 A dc/ 0.4 A to 300 A ac
175/177/179	0.11 A to 100 A dc/ 0.3 A to 70 A ac*	1.6 A to 400 A dc/ 30 A to 400 A ac	1.6 A to 1000 A dc/ 30 A to 600 A ac	30 mA to 30 A dc/ 300 mA to 20 A ac	30 mA to 30 A dc/ 300 mA to 20 A ac	0.1 A to 450 A dc/ 3 A to 300 A ac
1577/1587 FC Insulation Meter	0.1 A to 100 A dc/ 0.3 A to 70 A ac*	1.2 A to 400 A dc/ 30 A to 400 A ac	1.2 A to 1000 A dc/ 30 A to 600 A ac	30 mA to 30 A dc/ 300 mA to 20 A ac	30 mA to 30 A dc/ 300 mA to 20 A ac	0.1 A to 450 A dc/ 3 A to 300 A ac
83V/88V	0.1 A to 100 A dc/ 0.1 A to 70 A ac*	1 A to 400 A dc/ 1 A to 400 A ac	1 A to 1000 A dc/ 1 A to 600 A ac	30 mA to 30 A dc/ 30 mA to 20 A ac	30 mA to 30 A dc/ 30 mA to 20 A ac	0.1 A to 450 A dc/ 0.1 A to 300 A ac
87V	0.1 A to 100 A dc/ 0.2 A to 70 A ac*	1 A to 400 A dc/ 20 A to 400 A ac	1 A to 1000 A dc/ 20 A to 600 A ac	30 mA to 30 A dc/ 200 mA to 20 A ac	30 mA to 30 A dc/ 200 mA to 20 A ac	0.1 A to 450 A dc/ 2 A to 300 A ac
287/289	0.1 A to 100 A dc/ 0.1 A to 70 A ac*	1 A to 400 A dc/ 1 A to 400 A ac	1 A to 1000 A dc/ 1 A to 600 A ac	30 mA to 30 A dc/ 30 mA to 20 A ac	30 mA to 30 A dc/ 30 mA to 20 A ac	0.1 A to 450 A dc/ 0.1 A to 300 A ac
123/124 ScopeMeters	0.1 A to 100 A dc/ 0.25 A to 70 A ac	1 A to 400 A dc/ 25 A to 400 A ac**	1 A to 1000 A dc/ 25 A to 600 A ac**		30 mA to 30 A dc/ 250 mA to 20 A ac	0.1 A to 450 A dc/ 2.5 A to 300 A ac
190 Series ScopeMeters	0.1 A to 100 A dc/ 0.1 A to 70 A ac	1 A to 400 A dc/ 5 A to 400 A ac**	1 A to 1000 A dc/ 5 A to 600 A ac**	30 mA to 30 A dc/ 50 mA to 20 A ac**	30 mA to 30 A dc/ 50 mA to 20 A ac	0.1 A to 450 A dc/ 0.5 A to 300 A ac
8808A	0.1 A to 100 A dc/ 0.1 A to 70 A ac*	1 A to 400 A dc/ 2 A to 400 A ac	1 A to 1000 A dc/ 2 A to 600 A ac	30 mA to 30 A dc/ 30 mA to 20 A ac	30 mA to 30 A dc/ 30 mA to 20 A ac	0.1 A to 450 A dc/ 0.2 A to 300 A ac
8845A/8846A	0.1 A to 100 A dc/ 0.1 A to 70 A ac*	1 A to 400 A dc/ 1 A to 400 A ac	1 A to 1000 A dc/ 1 A to 600 A ac	30 mA to 30 A dc/ 30 mA to 20 A ac	30 mA to 30 A dc/ 30 mA to 20 A ac	0.1 A to 450 A dc/ 0.1 A to 300 A ac
705/707	0.1 A to 100 A dc, no ac*	4 A to 400 A dc, no ac	4 A to 1000 A dc, No ac	40 mA to 30 A dc, no ac	40 mA to 30 A dc, no ac	0.4 A to 450 A dc, no ac
715	0.1 A to 100 A dc, no ac*	4 A to 400 A dc, no ac	4 A to 1000 A dc, No ac	40 mA to 30 A dc, no ac	40 mA to 30 A dc, no ac	0.1 A to 450 A dc, no ac
787/789 Process Meters	0.1 A to 100 A dc/ 0.2 A to 70 A ac*	1 A to 400 A dc/ 20 A to 400 A ac	1 A to 1000 A dc/ 20 A to 600 A ac	30 mA to 30 A dc/ 200 mA to 20 A ac	3 mA to 30 A dc/ 200 mA to 20 A ac	0.1 A to 450 A dc/ 2 A to 300 A ac

* Requires PM9081 Adapter
** Requires PM9082/001 Adapter

Fluke lights and hangers

Free your hands and shed light on the contact point

LVD1 Volt Light
- Exclusive dual-sensitivity
- Detects voltages from 40 V ac to 300 V ac
- Voltage detector glows blue at 50 Hz to 60 Hz or 2.5 cm to 38 cm (1 in to 5 in) away from source
- Ultra-bright white LED with 100,000 hour bulb life
- AAA battery included

LVD2 Volt Light
- Non-contact ac voltage detector and bright white LED flashlight
- Detects voltage from 90 V to 600 V ac from one to 12.7 cm (5 inches) away
- CAT IV rated, one-year warranty

L205 Mini Hat Light
Rugged, high-intensity Xenon worklight.
- Attaches to a baseball cap
- Includes a hat clip
- Includes two AAA batteries
- Waterproof

L206 Deluxe LED Hat Light (hard hat not included)
Attach it to a hard hat, a baseball cap, or even a panel door.
- Three super bright white LEDs never burn out
- Special hard-hat attachment included
- 40-hour battery life
- Includes three AAA batteries

TPAK ToolPak™ Magnetic Meter Hanger
- Free both hands to make measurements
- Hang your meter from metallic surfaces like panels and pipes
- Kit includes universal hanger clips (two), hook and loop straps (two lengths), adapter and strong magnet
- Attaches to back of many Fluke meters, including 110, 170, 180, 280 Series, 87V and 83V DMMs, 724, 725 and 789 Process Calibrators, 70 Series III DMMs, 1503, 1507, 1577 and 1587 Insulation Multimeters and 50 Series II Digital Thermometers

LeadWrap Test Lead Fasteners
- Keep your favorite leads together
- Hook and loop fasteners
- Three per package

L215 SureGrip™ Kit with Probe Light and Probe Extenders
- L200 probe light
- TP220 SureGrip test probes
- TL224 SureGrip test leads
- TP280 test probe extenders
- Soft foldable pouch, keeps the entire set together

L210 Probe Light and Probe Extenders
- 20.3 cm (8 in) probe extenders fit modular test probes
- Probe extender complies with EN 61010-031
- Bright white LED illuminates contact area
- Probe light fits on extender or test probe

Specialty accessories and software

Get more out of your test tool

FlukeView® Forms

Harness the power of the data logging function on your Fluke Digital Multimeter, Thermometer or ProcessMeter. Log live readings while connected to a PC, or leave your Fluke 289, 789 or 54-II in place to capture up to 1,000 readings for download to a PC.

Choose the model that's right for you:

- **FVF-SC2:** Includes software and cable used with 280 Series DMMs and 789 ProcessMeters, and the 1550 and C/1555 Insulation Tester
- **FVF-SC3:** Includes software and cable used with 45 Bench Meters
- **FVF-SC4:** Includes software and cable used with 8845A and 8846A Multimeters

Go to **www.fluke.com/flukeviewforms** to download the demo.

FlukeView® Forms Basic

An abridged version of FlukeView Forms.

- Available for use with 280 Series DMMs and 789 ProcessMeters, only
- Upgrade to the full FlukeView Forms with FVF-UG
- Compatible with the 280 and 789 series only

Choose the model that's right for you:

- **FVF-Basic:** FlukeView Forms Basic transfers data from Fluke test tool to a PC. Displays readings in table or graphical format
- **FVF-SC2, -SC4:** FlukeView Forms Full provides Basic software functions plus customizable documents and templates
- **FVF-UG:** FlukeView Forms Upgrade, compatible with all forms of FlukeView Forms (Basic and Full)

Stray voltage

SV225

- Eliminates stray voltage due to capacitance between wires in electrical installations
- Compatible with all instruments and test leads that accept standard 4 mm shrouded banana connectors

Pressure and vacuum

PV350 Pressure Vacuum Module

- Digital pressure and vacuum measurements in a single module
- Measures HVAC/R, hydraulic and pneumatic pressures to 350 psig/2413 kPa (usable to 500 psig)
- Measures to 760 mmHg (29.9 in Hg) vacuum (not intended for measuring microns of vacuum)
- Compatible with most digital multimeters

FLUKE CONNECT™

Fluke Connect®

ir3000 FC Connector

- Get all the benefits of the Fluke Connect app, and be on the same page, even while in different places
- Wirelessly share measurements with your team anywhere, anytime
- Connect the Fluke 289/287 True-rms Logging Multimeter and the 789 ProcessMeter with the ir3000 FC Connector

Fluke Connect® Wireless SD Card

Wirelessly enable your Fluke TiX1000, TiX660, or TiX640 infrared camera with the Fluke Connect wireless SD card. Instantly upload, share and analyze data with anyone on your team. The Fluke Connect WiFi SD Card is included with compatible models, but is shipped separately due to country restrictions.

Fuse selection guide

Replacement fuses for Fluke DMMs are available from your distributor. To order direct from Fluke call 1-800-44-FLUKE (U.S.) or email fluke-info@fluke.com.

Model	Fuse Requirements
21-III/75-III/73-III	P/N 871173 630 mA 250 V fuse P/N 803293 11 A 1000 V fuse
27 (S/N<7247001)	P/N 871173 630 mA 250 V fuse P/N 871202 3 A 600 V fuse P/N 892583 15 A 600 V fuse
27 (S/N>7247001	P/N 943121 440 mA 1000 V fuse P/N 803293 11 A 1000 V fuse
83/85/87 (S/N>6565000)	P/N 943121 440 mA 1000 V fuse P/N 803293 11 A 1000 V fuse
83-III/85-III/87-III 87-IV/89-IV/187/189/287/289/ 77-III/79-III/23-III/26-III/175/177/179/77-IV/27-II/28-II	P/N 943121 440 mA 1000 V fuse P/N 803293 11 A 1000 V fuse
111/112/115/117/233	P/N 803293 11 A 1000 V fuse
1577/1587	P/N 943121 440 mA 1000 V fuse
1503/1507	P/N 2279339 315 mA 1000 V fuse
787/789	P/N 943121 440 mA 1000 V fuse (Qty 2)

Selection Guide	110/111/112	114/115/116/117	27 II/28 II/27	175/177	179	80 Series III/83V	87/89 IV	87V	233	287/289/187/189	43B	120 Series	190 Series	51/52/53/54 II	705/707	715	725/726	741/743	744	787/789	1587 FC	1577
TPAK	•	•		•	•	83V	•	•	•	•				•			•			789	•	•
PV350 (pressure)	•	•	•	•	•	•	•	•	•	•	•	•	•		•	•		•	•	•	•	•
FOM (fiber optic)	•	•	•	•	•	•	•	•	•	•	•	•	•		•	•		•	•	•		

Model	Instrument compatibility	Cable
FVF-BASIC	Fluke 280 Series, 789, 1550B, 1653, 180 Series	USB/IR
FVF-SC2	Fluke 280 Series, 789, 1550B, 1653, 180 Series	USB/IR
FVF-SC4	Fluke 8808A, 8845A, 8846A, 45*	USB/Serial
IR189USB	USB cable for Fluke-18X, 28X DMMs	USB/IR

Expert resources and advice

You can depend on www.fluke.com to find the information you need to help you on the job—and, it's all formatted for your smart phone. Besides in-depth product information and specifications, learn best practices for using Fluke tools, watch expert how-to videos, register for webinars and more.

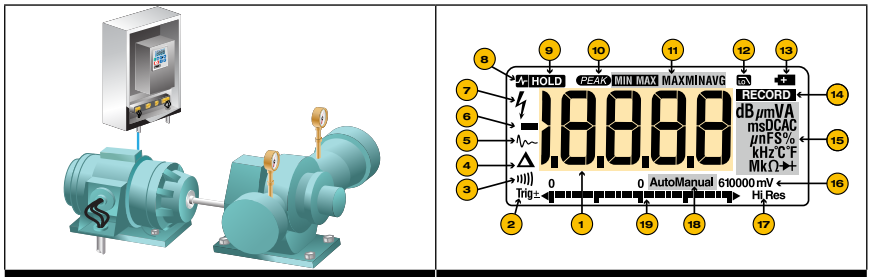
In the training section, you'll find our library of excellent content plus measurement and test tool basics that cover our core product features: what they're for and how to use them. In the community section, look at Fluke News Plus for information from industry professionals that can further help you take full advantage of your Fluke tools. Some of the materials available include:

- How-to videos
- Product videos
- Application notes
- Webinars
- Training library
- Hands-on workshops
- Users manuals
- White papers
- Case studies

Applications/videos

www.fluke.com/training

Online fundamentals



www.fluke.com/measurebasics

www.fluke.com/dmmbasics

Online training

PROACTIVE MAINTENANCE

How much does unexpected downtime cost your facility per minute, hour, or day? In your facility, how much of that unexpected downtime can you prevent? More than 55% of maintenance resources and activities of an average facility are still reactive. Leverage on Fluke tools to maximize uptime and build confidence in maintenance schedules, budgeting and productivity estimates.

www.fluke.com/proactivemaintenance

ENERGY EFFICIENCY

Energy is a critical issue for facilities around the world. Undiscovered and uncorrected energy waste represents tremendous savings. Our Energy Efficiency Solution Center will help you use measurement data to support the decisions and actions that reduce energy consumption, while increasing energy efficiency.

www.fluke.com/energy

FLUKE®

NEW PRODUCTS

See more on pages 4 to 15

Fluke T6 Electrical Tester

Working in electrical boxes jammed with wires can be challenging when you're trying to find a safe metallic contact point. But with our latest innovation – FieldSense technology – you can now measure voltage without test leads using the new Fluke T6 Electrical Testers.

Fluke Ti450 SF6 Gas Detector

Identify SF6 gas leaks with the same camera you use for electrical inspections. The new Fluke Ti450 SF6 Gas Detector is a top performing infrared camera with MultiSharp™ Focus and the added feature of SF6 gas detection. Best of all, it is affordable enough to own.

Fluke 1742, 1746 and 1748 Three-Phase Power Quality Loggers

Designed specifically for technicians and engineers who need the flexibility to troubleshoot, quantify energy usage and analyze power distribution systems the new 1740 series power quality loggers give you fast, easy access to the data you need to make critical power quality and energy decisions in real-time.

Fluke 729 Automatic Pressure Calibrator

Pressure calibration is critical to process control systems. While pressure instrumentation can be found in nearly every process plant, proper calibration of this instrumentation can be frustrating. The new Fluke 729 Automatic Pressure Calibrator changes the way you calibrate pressure, alleviating common pain points, and making calibration easier than ever.

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