



Selling the difference with Fluke clamp meters

FLUKE®

1 Clamp meter basics

A clamp meter is an electrical tester that combines a basic digital multimeter with a current sensor that is clamped around conductors. The primary advantage of a clamp meter is the integrated jaw design, which allows users to measure large currents at any point in the electrical system, without the need to break the connection or use adapters or scaling factors.

2 Why choose a clamp meter

Clamps provide the ideal measurement flexibility for electricians by providing all of the measurements needed, without having to reach for another tool.

- Ability to measure large ac currents, ac and dc voltage, resistance, continuity, and with some models dc current, capacitance, temperature, frequency and more
- Typically measure to the nearest tenth of a unit (rather than the milli-units you find in a full function multimeter) making them perfect for electrical work
- Integrated jaw design allows users to measure current of a wire at any point in the electrical system without the need to break the connection or use adapters or scaling factors

Industrial situations often call for simultaneous measurement as part of troubleshooting so many of those users carry two meters: one to measure electrical current and one to measure voltage.

For electricians, a clamp meter is the most versatile diagnostic tool available. Users doing industrial troubleshooting benefit from a separate clamp and DMM due to the unique capability that each tool provides the ability to conduct simultaneous readings.

3 The Fluke clamp value proposition

Fluke clamp meters, designed to perform in the toughest environments, give repeatable, noise-free results to protect users and their reputation for keeping things up and running.

Designed to perform

Fluke features have advanced performance, designed to be simple to use by avoiding feature gimmicks that rarely help with the job at hand.

Repeatable, noise-free results

Understanding of users' workplaces and superior electrical design allows our clamps to provide noise free, reliable current readings without breaking the loop.

Protects their reputation

Keeps users safe and allows them to trust the results. They can confidently base professional judgments on the readings the clamp is giving.

4 Unique selling points

Our clamps are extensively researched, designed, tested and built at Fluke. Our teams spend weeks with users, and then design the clamp with the end user in mind.

Best in class design

Fluke clamps are simple to use and optimized for the application.

- Large, easy to read display automatically sets the correct measurement range so you do not need to change switch positions while taking a measurement
- Ergonomic design fits in your hand and can be used while wearing personal protective equipment
- iFlex coil is designed to fit into crowded junction boxes
- Removable display enables remote measurements increasing productivity, safety and convenience.

Proven rugged and reliable

Fluke clamps are the most rugged on the market exceeding required safety standards. They are designed to:

- Pry apart wires, be dropped from a ladder or bounce around in the back of a truck
- Work where the problems are; inside, outside, in hot or cold weather
- Endure more than 40 extreme tests (including vibration, shock, temperature, electrical interface, and switch life), before they are released for sale

Latest technology

The latest technology ensures users can trust their readings, quickly assess problems and determine root cause.

Inrush

Fluke clamps use proprietary technology to filter out noise and capture the starting current exactly as the circuit protection sees it.

- Inrush feature is specifically designed to capture motor inrush or starting current
- Different from Peak, Min/Max, or competitors inrush features (which are not consistent in repeated readings), Fluke clamps measure inrush, the starting current, the same way the over current protection device 'sees' the current

State of the art signal processing

Fluke clamps are designed for use in noisy electrical environment, providing:

- Stable readings in voltage, current and frequency when measuring the output of a variable frequency motor drive
- Integrated filtering without affecting display response time






Inrush and advanced signal processing allows you to spend time troubleshooting the system under test, not your clamp.

5 Fluke provides end-user education and application solutions

According to a 2008 study, more than 90 percent of electrical and industrial users prioritize purchasing a Fluke clamp over any other brand. Why? Fluke's commitment to build the highest quality, safest clamps incorporating the most advanced technology with the best accuracy.

To learn more, please visit: www.fluke.co.uk/clamps

Clamp meters designed for the way you work.

		Fluke 381	Fluke 376	Fluke 375	Fluke 374	Fluke 373
						
AC current (jaw)	Range	999.9 A	999.9 A	600.0 A	600.0 A	600.0 A
	Accuracy	2 % ± 5 digits	2 % ± 5 digits	2 % ± 5 digits	2 % ± 5 digits	2 % ± 5 digits
iFlex flexible current probe		Included	Included	Compatible	Compatible	–
AC current (iFlex)	Range	2500 A	2500 A	2500 A	2500 A	–
	Accuracy	3 % ± 5 digits	3 % ± 5 digits	3 % ± 5 digits	3 % ± 5 digits	–
DC current	Range	999.9 A	999.9 A	600.0 A	600.0 A	–
	Accuracy	2 % ± 5 digits	2 % ± 5 digits	2 % ± 5 digits	2 % ± 5 digits	–
AC voltage	Range	1000 V	1000 V	600 V	600 V	600 V
	Accuracy	1.5 % ± 5 digits	1.5 % ± 5 digits	1.5 % ± 5 digits	1.5 % ± 5 digits	1 % ± 5 digits
DC voltage	Range	1000 V	1000 V	600 V	600 V	600 V
	Accuracy	1 % ± 5 digits	1 % ± 5 digits	1 % ± 5 digits	1 % ± 5 digits	1 % ± 5 digits
mV dc range		–	500 mV	500 mV	–	–
Resistance	Range	60,000 Ω	60,000 Ω	60,000 Ω	6000 Ω	6000 Ω
	Accuracy	1 % ± 5 digits	1 % ± 5 digits	1 % ± 5 digits	1 % ± 5 digits	1 % ± 5 digits
Capacitance	Range	–	1 µF to 1000 µF	1 µF to 1000 µF	1 µF to 1000 µF	10 µF to 1000 µF
	Accuracy	–	1.9 % ± 2 digits	1.9 % ± 2 digits	1.9 % ± 2 digits	1.9 % ± 2 digits
Continuity		≤ 30 Ω	≤ 30 Ω	≤ 30 Ω	≤ 30 Ω	≤ 30 Ω
Frequency		5 Hz to 500 Hz	5 Hz to 500 Hz	5 Hz to 500 Hz	–	–
Remote display		Yes	–	–	–	–
AC response		True-RMS	True-RMS	True-RMS	True-RMS	True-RMS
Backlight		Yes	Yes	Yes	Yes	Yes
Data hold		Yes	Yes	Yes	Yes	Yes
Min/Max/Avg		Yes	Yes	Yes	Yes	–
Inrush		Yes	Yes	Yes	Yes	–
Size	HxWxD (mm)	280 x 88 x 50	248 x 85 x 45	248 x 85 x 45	248 x 85 x 45	232 x 85 x 45
	Max wire dia.	34 mm	34 mm	34 mm	34 mm	32 mm
	Weight (g)	540	375	375	375	370
Category rating		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 1000 V CAT IV 600 V	CAT III 600 V CAT IV 300 V
Warranty		Three-year	Three-year	Three-year	Three-year	Three-year

Five things for users to consider when buying a clamp:

Does the brand have a reputation for safe and reliable test equipment?

The manufacturer should provide information on safety category ratings, and who builds and tests their clamps to exceed international safety standards.

Will the clamp give accurate and repeatable results?

Understanding the importance of a True-RMS display and avoiding the fine print on clamp specifications.

Will the clamp work where the users do?

Users need to consider where they use their clamp as features such as low-pass filter eliminates electronic interference that may distort readings.

Are the batteries easy to replace?

Standard alkaline batteries provide the flexibility users need at an affordable price.

Has the manufacturer prioritized the number of features over feature quality?

The more gadgets built into a clamp meter, the harder it becomes to use and the worse it performs. Competitors frequently add features in lieu of quality performance factors.

To learn more, please visit:
www.fluke.co.uk/clamps