TECHNICAL DATA

Fluke 393 FC CAT III 1500 V True-rms Clamp Meter with iFlex

FLUKE CONNECT

MEASURE SAFELY
CAT III 1500 V rated clamp meter

VERSATILE CLAMP JAW
Thin jaw for access to cables in crowded combiner boxes, able to clamp around multiple cables

IP54 RATED
Work outdoors in dusty or damp conditions

MORE FUNCTIONS, AUTOMATIC SAFEGUARDS
Work efficiently with dc power measurement, audio polarity and visual continuity

The world's only CAT III 1500 V current clamp

The 393 FC CAT III 1500 V True-rms Clamp Meter with iFlex is designed for technicians who work in dc environments up to 1500 V: solar arrays, wind power, electric railways, data centers battery banks for uninterruptible power supplies. The clamp will measure up to 1500 V dc, 1000 V ac, and up to 999.9 A dc or ac through the clamp jaw. The included iFlex flexible current probe extended ac current measurements up to 2500 amps.

This clamp has a thin jaw, giving you access to cables in crowded combiner boxes. Test leads are designed with your work in mind, and are also rated to CAT III 1500 V.

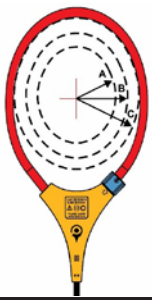
Other key functions:

- IP54 rated, ideal for work outdoors on solar arrays and wind power systems
- DC power measurement, showing readings in kVA
- Audio Polarity indicator helps prevent accidental miswires
- Visual Continuity turns provide a bright green light in the display, ideal when working in dark and noisy environments
- Logging and reporting of test results via Fluke Connect software

When measuring ac current the included iFlex flexible current probe gives you unparalleled access to cable is tight spaces. The iFlex probe can be twisted through extremely small spaces and provide accurate current measurements.

Specifications

General specifications	
Maximum voltage between any terminal and earth ground	1000 V AC 1500 V DC
Batteries	2 AA IEC LR6 alkaline
Display	Dual display with backlight
Automatic power off	20 minutes
Electrical specifications	
Accuracy	Accuracy is specified for 1 year after calibration, at operating temperatures of 18 °C to 28 °C, relative humidity at 0 % to 75 %. Accuracy specifications take the form of: ±([% of Reading] + [Number of Least Significant Digits]).
Temperature coefficients	Add 0.1 x specified accuracy for each °C > 28 °C or < 18 °C
AC current: jaw	
Range	999.9 A
Resolution	0.1 A
Accuracy	2 % + 5 digits (10 Hz to 100 Hz) 2.5 % + 5 digits (100 Hz to 500 Hz)
Crest Factor (50/60 Hz)	2.5 @ 600.0 A 3.0 @ 500.0 A 1.42 @ 999.9 A Add 2 % for C.F. >2
AC current: flexible current probe	
Range	999.9 A 2500 A
Resolution	0.1 A (≤999.9 A) 1 A (≤2500 A)
Accuracy	3 % RD + 5 digits (10 Hz to 500 Hz)
Crest Factor (50/60Hz)	2.5 @ 1400 A 3.0 @ 1100 A 1.42 @ 2500 A Add 2 % for C.F. >2
Position sensitivity	



Distance from Optimum	i2500-10 Flex	i2500-18 Flex	Error
A	0.5 in (12.7 mm)	1.4 in (35.6 mm)	± 0.5 %
B	0.8 in (20.3 mm)	2.0 in (50.8 mm)	± 1.0 %
C	1.4 in (35.6 mm)	2.5 in (63.5 mm)	± 2.0 %

Measurement uncertainty assumes centralized primary conductor at optimum position, no external electrical or magnetic field, and within operating temperature range.

DC current	
Range	999.9 A
Resolution	0.1 A
Accuracy	2 % RD + 5 digits[1] [1]When using the ZERO function to compensate for offsets.
AC voltage	
Range	600.0 V 1000 V
Resolution	0.1 V (≤600.0 V) 1 V (≤1000 V)
Accuracy	1 % RD + 5 digits (20 Hz to 500 Hz)

Specifications (continued)

DC voltage	
Range	600.0 V 1500 V
Resolution	0.1 V (≤600.0 V) 1 V (≤1500 V)
Accuracy	1 % RD + 5 digits
mV dc	
Range	500.0 mV
Resolution	0.1 mV
Accuracy	1 % RD + 5 digits
Amps frequency: jaw	
Range	5.0 Hz to 500.0 Hz
Resolution	0.1 Hz
Accuracy	0.5 % RD + 5 digits
Trigger level	5 Hz to 10 Hz, ≥10 A 10 Hz to 100 Hz, ≥5 A 100 Hz to 500 Hz, ≥10 A
Amps frequency: flexible current probe	
Range	5.0 Hz to 500.0 Hz
Resolution	0.1 Hz
Accuracy	0.5 % RD + 5 digits
Trigger level	5 Hz to 20 Hz, ≥25 A 20 Hz to 100 Hz, ≥20 A 100 Hz to 500 Hz, ≥25 A
Voltage frequency	
Range	5.0 Hz to 500.0 Hz
Resolution	0.1 Hz
Accuracy	0.5 % RD + 5 digits
Trigger level	5 Hz to 20 Hz, ≥5 V 20 Hz to 100 Hz, ≥5 V 100 Hz to 500 Hz, ≥10 V
DC power	
Range	600.0 kVA (600.0 V dc range) 1500 kVA (1500 V dc range)
Resolution	0.1 kVA 1 kVA
Accuracy	2 % RD + 2.0 kVA 2 % RD + 20 kVA
Resistance	
Range	600.0 Ω 6000 Ω 60.00 kΩ
Resolution	0.1 Ω (≤600.0 Ω) 1 Ω (≤6000 Ω) 0.01 kΩ (≤60.00 kΩ)
Accuracy	1 % RD + 5 digits
Capacitance	
Range	100.0 µF 1000 µF
Resolution	0.1 µF (≤100.0 µF) 1 µF (≤1000 µF)
Accuracy	1 % RD + 5 digits
Inrush trigger level	5 A

Specifications (continued)

Mechanical specifications	
Size (L x W x H)	281 mm x 84 mm x 49 mm
Weight (with batteries)	520 g
Jaw opening	34 mm
Flexible current probe diameter	7.5 mm
Flexible current probe cable length (head to electronics connector)	1.8 m
Environmental specifications	
Operating temperature	–10 °C to 50 °C
Storage temperature	–40 °C to 60 °C
Operating humidity	Non-condensing (<10°C) ≤90 % RH (at 10 °C to 30 °C) ≤75 % RH (at 30 °C to 40 °C) ≤45 % RH (at 40 °C to 50 °C)
Operating altitude	2000 m
Storage altitude	12,000 m
Ingress Protection (IP) Rating	
Electromagnetic Compatibility (EMC)	
International	IEC 61326-1: Portable, Electromagnetic Environment, IEC 61326-2-2 CISPR 11: Group 1, Class A Group 1: Equipment has intentionally generated and/or uses conductively-coupled radio frequency energy that is necessary for the internal function of the equipment itself. *Class A: Equipment is suitable for use in all establishments other than domestic and those directly connected to a low-voltage power supply network that supplies buildings used for domestic purposes. There may be potential difficulties in ensuring electromagnetic compatibility in other environments due to conducted and radiated disturbances.* *Caution: This equipment is not intended for use in residential environments and may not provide adequate protection to radio reception in such environments.*
Korea (KCC)	Class A equipment (Industrial Broadcast and Communications Equipment) *Class A: Equipment meets requirements for industrial electromagnetic wave equipment and the seller or user should take notice of it. This equipment is intended for use in business environments and not to be used in homes.*
USA (FCC)	47 CFR 15 subpart B. This product is considered an exempt device per clause 15.103.
Safety	
General	IEC 61010-1, Pollution Degree 2
Measurement	IEC 61010-2-032: CAT III 1500 V / CAT IV 600 V IEC 61010-2-033: CAT III 1500 V / CAT IV 600 V
Wireless radio	
Radio frequency certification	FCC ID: T68-FBLE, IC: 6627A-FBLE
Wireless radio frequency range	2400 MHz to 2483.5 MHz
Output power	<100 mW
SIMPLIFIED EU DECLARATION OF CONFORMITY Hereby, Fluke declares that the radio equipment contained in this Product is in compliance with Directive 2014/53/EU. The full text of the EU declaration is available at the following Internet address: fluke.com/en-us/declaration-of-conformity	

Ordering information

Fluke 393 FC CAT III 1500 V True-rms Clamp Meter with iFlex

Included

- Fluke 393 FC CAT III 1500 V True-rms Clamp Meter with iFlex
- Test leads, CAT III 1500 V rated, right angle plugs, with safety caps
- iFlex 18 inch flexible current probe
- TPAK magnetic hanging strap
- Premium carrying case
- 3-year warranty

Visit www.fluke.com to get complete details on these products or ask your local Fluke sales representative.

Save all measurements, including dc power, to a smartphone and the cloud using Fluke Connect software.

Preventive maintenance simplified. Rework eliminated.

Save time and improve the reliability of your maintenance data by wirelessly syncing measurements using the Fluke Connect system.

- Eliminate data-entry errors by saving measurements directly from the tool and associating them with the work order, report or asset record.
- Maximize uptime and make confident maintenance decisions with data you can trust and trace.
- Move away from clipboards, notebooks and multiple spreadsheets with a wireless one-step measurement transfer.
- Access baseline, historical and current measurements by asset.
- Share your measurement data using ShareLive™ video calls and emails.
- The Fluke 1587 FC Insulation Multimeter is part of a growing system of connected test tools and equipment maintenance software. Visit the Fluke website to learn more about the Fluke Connect system.

Find out more at **fluke.com**

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ANDROID APP ON Google Play

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Smartphone wireless service and data plan not included with purchase. Fluke Connect is not available in all countries.

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