

TECHNICAL DATA

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



Key features

- Measure safely with CAT III 1500 V rated clamp meter
- Thin jaw for access to cables in crowded combiner boxes
- Sturdy IP54 rated for outdoor use
- Work efficiently with dc power measurement, audio polarity and visual continuity

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

The 393 FC CAT III 1500 V True-rms Clamp Meter with iFlex is designed for technicians who work in high voltage dc environment: 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 dc.

Other key functions:

- $\bullet\,$ 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.

The world's first CAT III 1500 V true-RMS clamp meter

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

Specifications:			
General			
Maximum voltage between any Terminal and Earth Ground			
AC	1000 V		
DC	1500 V		
Batteries	2 AA IEC LR6 alkaline		
Display	Dual display with backlight		
Automatic Power Off	20 minutes		
Electrical			
Accuracy			
Accuracy is specified for 1 year after calibration, at operation of: \pm ([% of Reading] + [Number of Least Significant Digits])	ing temperatures of 18 °C to 28 °C, relative humidity at 0 % to .	o 75 %. Accuracy specifications take the form	
Temperature Coefficients	Add 0.1 x specified accuracy for each	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)	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 %
В	0.8 in (20.3 mm)	2.0 in (50.8 mm)	±1.0 %
С	1.4 in (35.6 mm)	2.5 in (63.5 mm)	±2.0 %
Measurement uncertainty assumes centralized primary con range.	ductor at optimum position, no external electrical or	magnetic field, and within operating	temperature
DC Current			
Range	999.9 A		
Resolution	0.1 A		
Accuracy	2 % RD + 5 digits ^[1]		
	[1] When using the ZERO (B) fur	nction 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)	
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	
33	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	
Mechanical		
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		
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	IEC 60529: IP54 non-operating	
Electromagnetic Compatibility (EMC)	, , , , , , , , , , , , , , , , , , ,	



International	IEC 61326-1: Portable, Electromagnetic Environment, IEC 6 Group 1, Class A	IEC 61326-1: Portable, Electromagnetic Environment, IEC 61326-2-2 CISPR 11: Group 1, Class A	
	Group 1: Equipment has intentionally generated and/or use radio frequency energy that is necessary for the internal fuitself.		
	her than domestic and those directly connected to a low-voltage power supply I difficulties in ensuring electromagnetic compatibility in other environments du		
Caution: This equipment is not intended for use in residential e	environments and may not provide adequate protection to radio reception in su	ch environments.	
Korea (KCC)	Class A equipment (Industrial Broadcast & Communication	ns Equipment)	
	equipment and the seller or user should take notice of it. The	Class A: Equipment meets requirements for industrial electromagnetic wave equipment and the seller or user should take notice of it. This equipment is intende for use in business environments and not to be used in homes.	
USA (FCC)	47 CFR 15 subpart B. This product is considered an exemp 15.103.	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 t	this Product is in compliance with Directive 2014/53/EU.		
The full text of the EU declaration is available at the following	Internet address:		
www.fluke.com/en-us/declaration-of-conformity			

