

Clamp meter

➤ Fluke 376 True RMS AC/DC Clamp Meter with iFlex®

You can measure around awkward sized conductors with the Fluke 376 True RMS Clamp Meter with iFlex®, expanding your measurement range to 2500 A AC. With True RMS voltage and current measurements, the Fluke 376 can read up to 1000 V and 1000 A in both AC and DC modes.

1. Fluke 376 True RMS AC/DC Clamp Meter with iFlex®



➤ **Key Features**

- Flex® Flexible Current Probe expands the measurement range to 2500 A AC
- CAT IV 600 V, CAT III 1000 V
- True RMS AC voltage and current for accurate measurements on non-linear signals
- Min, max, average and Inrush recording to capture variations automatically
- Integrated low pass filter and state-of-the-art signal processing allows for use in noisy electrical environments while providing stable readings
- Proprietary Inrush measurement technology to filter out noise and capture motor starting current exactly as the circuit protection sees it
- Ergonomic design fits in your hand and can be used while wearing protective equipment
- Large, easy to read backlight display automatically sets the correct measurement range so you do not need to change the switch positions while taking a measurement
- Three-year warranty
- Soft Carrying Case
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Electrical Specifications


AC Current via Jaw

Range	376	600.0 A 999.9 A
Resolution		0.1 A
Accuracy		2% ± 5 digits (10-100 Hz) 2.5% ± 5 digits (100-500 Hz)
Crest Factor (50/60 Hz)		3 @ 500 A (375 and 376 only) 2.5 @ 600 A

		1.42 @ 1000 A (376 only) Add 2% for C.F. > 2
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AC Current via Flexible Current Probe

Range		2500 A
Resolution	376	0.1 A (≤ 999.9 A) 1 A (≤ 2500 A)
Accuracy		3% ± 5 digits (5 – 500 Hz)
Crest Factor (50/60Hz)		3.0 at 1100 A (375 and 376 only) 2.5 at 1400 A 1.42 at 2500 A Add 2% for C.F. > 2

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

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

DC Current

Range	376	600.0 A 999.9 A
Resolution		0.1 A
Accuracy		2% ± 5 digits

AC Voltage

Range	376	600.0 V 1000 V
Resolution	376	0.1 V 0.1 V (≤ 600.0 V) 1 V (≤ 1000 V)
Accuracy		1.5% \pm 5 digits (20 – 500 Hz)

DC Voltage

Range	376	600.0 V 1000 V
Resolution	376	0.1 V 0.1 V (≤ 600.0 V) 1 V (≤ 1000 V)
Accuracy		1% \pm 5 digits

mV dc

Range	376	500.0 mV
Resolution		0.1 mV
Accuracy		1% \pm 5 digits

Frequency via Jaw

Range	376	5.0 - 500.0 Hz
Resolution		0.1 Hz
Accuracy		0.5% \pm 5 digits
Trigger Level		5 – 10 Hz, ≥ 10 A
		10 – 100 Hz, ≥ 5 A
		100 – 500 Hz, ≥ 10 A

Frequency via Flexible Current Probe

Range	376	5.0 - 500.0 Hz
Resolution		0.1 Hz
Accuracy		0.5% ± 5 digits
Trigger Level		5 – 20 Hz, ≥ 25 A
		20 – 100 Hz, ≥ 20 A
		100 – 500 Hz, ≥ 25 A
Resistance		
Range	376	6000 Ω 60 kΩ
Resolution	376	0.1 Ω (≤ 600 Ω) 1 Ω (≤ 6000 Ω) 10 Ω (≤ 60 kΩ)
Accuracy		1% ± 5 digits
Capacitance		
Range		1000 μF
Resolution		0.1 μF (≤ 100 μF) 1 μF (≤ 1000 μF)
Accuracy		1% ± 4 digits
Mechanical Specifications		
Size (L x W x H)		246 mm x 83 mm x 43 mm
Weight		388 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 – +50°C
Storage Temp	-40°C – +60°C
Operating Humidity	Non condensing (< 10 –°C) ≤ 90% RH (at 10°C – 30°C) ≤ 75% RH (at 30°C – 40°C) ≤ 45% RH (at 40°C – 50°C)
Operating Altitude	3000 meters
Storage Altitude	12,000 meters
EMC	EN 61326-1:2006
Temperature Coefficients	Add 0.1 x specified accuracy for each degree C above 28°C or below 18°C
Safety Specifications	
Safety Compliance	CAN/CSA-C22.2 No. 61010-1-04 ANSI/UL 61010-1:2004 ANSI/ISA-61010-1 (82.02.01):2004 EN/IEC 61010-1:2001 to 1000V Measurement Category (CAT) III 600V Measurement Category (CAT) IV Pollution Degree 2 EN/IEC 61010-2-032:2002 EN/IEC 61010-031:2002+A1:2008
Agency Approvals	
Batteries	2 AA, NEDA 15A, IEC LR6