

FLUKE.

Fluke 355/353 True-rms 2000 A Clamp Meters

Technical Data

High current and a large jaw, make these clamps well suited for industrial and utility applications

Confidently take reliable readings with the true-rms, Fluke 355/353 Clamp Meters; the tools of choice for high-current measurements up to 2000 A. The extra-wide

and large jaw capacity is found in high-current applications. The rugged design is suitable for 1000 V, CAT III applications. The extra element provides an extra element when taking measurements.

Accurate peak measurements can be taken using the in-rush current mode, ideal for motors and inductive loads. The 355 also measures voltage and resistance, making this the most versatile tool for utilities, electrical contractors, and industrial service technicians.



- Reliably handle a wide range of high-current applications with 2000 A ac + dc true-rms, 1400 A ac, and 2000 A dc
- The large 58 mm (2.3 in) jaw capacity is suitable for large, or multiple conductors
- CAT IV 600 V, CAT III 1000 V rating for added user protection
- In-rush current measurement captures 'power-on' surge current with accuracy and repeatability
- High voltage measurement of 1000 V ac + dc true-rms, 600 V ac, and 1000 V dc allows users to perform multiple tests with only one tool (355 only)
- Resistance to 400 kW coupled with a continuity beeper, provide the convenience of a multimeter (355 only)
- Accurately measure frequency up to 1 kHz for optimum troubleshooting
- Quickly analyze readings using the MIN, MAX, and AVG functions
- A large backlit display allows for easy visibility in low-lit areas
- Use the display hold feature to capture readings even when the display cannot be viewed
- Use the low-pass filter to smooth out noisy loads and stabilize readings

Specifications

Electrical specifications

Current measurement dc and ac 10 Hz to 100 Hz

Range	Resolution	Accuracy, A	Trigger Level for Inrush	Trigger Level for Hz Filter OFF	Trigger Level for Hz Filter ON
40 A	10 mA	1.5 % rdg + 15 digits	0.50 A	2.50 A	0.50 A
400 A	100 mA	1.5 % rdg + 5 digits	5.0 A	2.5 A	2.5 A
2000 A; 1400 ac rms	1 A	1.5 % rdg + 5 digits	5 A	8 A	8 A

Crest Factor (50/60 Hz)

Range	Crest Factor*
40 A	2 @ 33 A, 2.4 @ 27 A
400 A	2 @ 330 A, 2.4 @ 270 A
2000 A; 1400 ac rms	2 @ 1000 A, 2.4 @ 833 A

*Add 2 % to error spec for CF > 2

Current measurement ac 100.1 Hz to 1 kHz

Range	Resolution	Accuracy > 10 A	Trigger Level for Inrush	Trigger Level for Hz Filter OFF	Trigger Level for Hz Filter ON
40 A	10 mA	3.5 % rdg + 15 digits	0.50 A	2.50 A	0.50 A
400 A	100 mA	3.5 % rdg + 5 digits	5.0 A	2.5 A	2.5 A
2000 A; 1400 ac rms	1 A	3.5 % rdg + 5 digits	5 A	8 A	8 A

Voltage measurement (355 only) dc and ac 10 Hz to 100 Hz

600 V and 1000 V ranges have 10 % over range to 660 V and 1100 V respectively.

Range	Resolution	Accuracy	Trigger Level for Hz Filter OFF	Trigger Level for Hz Filter ON
4 V	1 mV	1 % rdg + 10 digits	0.050 V	0.050 V
40 V	10 mV	1 % rdg + 5 digits	0.25 V	0.25 V
400 V	100 mV	1 % rdg + 5 digits	6 V	6 V
600 V ac rms	1 V	1 % rdg + 5 digits	6 V	6 V
1000 V dc	1 V	1 % rdg + 5 digits	N/A	N/A

Voltage measurement (355 only) ac 100.1 Hz to 1 kHz

600 V and 1000 V ranges have 10 % over range to 660 V and 1100 V respectively.

Range	Resolution	Accuracy	Trigger Level for Hz Filter OFF	Trigger Level for Hz Filter ON
4 V	1 mV	3 % rdg + 10 digits	0.050 V	0.050 V
40 V	10 mV	3 % rdg + 5 digits	0.25 V	0.25 V
400 V	100 mV	3 % rdg + 5 digits	6 V	6 V
600 V ac rms	1 V	3 % rdg + 5 digits	6 V	6 V

Ohms measurement (355 only)

Range	Resolution	Accuracy
400 W	0.1 W	1.5 % + 5 digits
4 kW	1 W	1.5 % + 5 digits
40 kW	10 W	1.5 % + 5 digits
400 kW	100 W	1.5 % + 5 digits

Continuity beeper (355 only)

On at ≤ 30 W

Off at ≥ 100 W

Frequency measurement

Measurement range	5.0 Hz to 1 kHz
Resolution	0.1 Hz (15 Hz to 399.9 Hz); 1 Hz (400 Hz to 1 kHz)
Accuracy - 5.0 Hz to 100 Hz	0.2 % + 2 counts
Accuracy - 100.1 Hz to 1 kHz	0.5 % + 5 counts
Trigger level	Refer to current and voltage tables

General specifications

Batteries	Six 1.5 V AA NEDA 15 A or IEC LR6
Battery life (with typical usage, backlight off)	100 hours
Test leads	Rated to 1000 V
Weight	.814 kg (1.8 lb)
Jaw size	58 mm (2.28 in)
Dimensions (LxWxD)	300 mm x 98 mm x 52 mm (12 in x 3.75 in x 2 in)
Safety rating	IEC 61010-2-032, 600 V CAT IV, 1000 V CAT III

Environmental specifications

Operating temperature	32 °F to + 122 °F (0 °C to +50 °C)
Storage temperature	-4 °F to 140 °F (-20 °C to +60 °C)
Operating humidity	0 to 95 % (non-condensing)
Operating altitude	2000 m
Storage altitude	10,000 m
IP rating	42 (indoor use only)
Drop test requirements	1 m
EMI, RFI, EMC	FCC part 15, IEC/EN 61326-1:1997 class B, IEC/EN 61326:1997 3V/m, performance criteria B, EN61325
Temperature coefficients	Current: 0.1 % of reading per °C outside 22 °C to 24 °C Voltage: 0.1 % of reading per °C outside 22 °C to 24 °C

Ordering information:

Fluke-353 AC/DC True-rms Clamp Meter, 2000 A, Amps only

Includes: C43 Soft Carrying Case, 6 AA batteries, and users manual

Fluke-355 AC/DC True-rms Clamp Meter, 2000 A

Includes: C43 Soft Carrying Case, 6 AA batteries, TL224 1.5 m Silicone Rubber Test Leads, TP2 Test Probes, AC285 Alligator Clips, and users manual



Power Tech International Group

sales@powertech-group.com

www.powertech-group.com



Fluke-355



Fluke-353