

**FLUKE®**

## Fluke 317/319

### True RMS Clamp Meters

Accurate. Rugged. Safe.





# Fluke 317/319

## True RMS Clamp Meters

**FLUKE**

**New**



### Fluke 317, 319 functions: new/improved features

- 40 milli-amps measurement, highly accurate current testing: 0.01 A resolution, 1.6% precision measurements. (Many engineers measure low currents more often than high currents.)
- Thin jaws and small, light body mean the meters are more suitable for use in confined spaces.
- Inrush measurement technology allows measurement of starting current for devices such as motors and lightning equipment; integration time is 100 ms (Fluke 319 only).
- Frequency measurements enable accurate measurement of PWM output signal frequency (Fluke 319 only).
- Zero: Can display zero for direct current (DC) measurement.
- Large 1000 A AC/DC current measurement; AC/DC voltage measurement (Fluke 319 only).
- Min/max function file suitable for current and voltage
- RMS
- 6000 digit display
- Large backlit display for viewing
- 4000  $\Omega$  resistance measuring span
- Screen save function can save measurement results on the screen
- Continuity beeper  $\leq 30 \Omega$
- Auto Power Off function maximises battery life span, so the instrument will work when needed
- Clamp opening: 37 mm

### General specifications

Power supply	3x AAA IEC LR03 batteries
Max. jaw opening	37 mm (1.45 in)
Jaw diameter	37 mm (1.45 in)
Dimensions (L x W x H )	234 mm x 74 mm x 34.8 mm
Weight	384 g (13.5 oz) (with battery)
Calibration	Fully manual calibration and testing, one year calibration testing period
Digital display resolution	6000 digits
Safety	CE EN/IEC 61010-1 and IEC 61010-2-032 Measurement category: 600 V CAT III (Category III)

### Environmental indicators

Working temperature	-10°C to 50°C (14°F to 122°F)
Storage temperature	-40°C to 60°C (-40°F to 140°F)
IP equivalent	IP40
Drop test requirements	Drop height tested to 1 m (3 ft), all six sides tested, oak flooring

### General technical parameters

Accuracy is applicable at a temperature of 23°C $\pm$ 5°C (73°F $\pm$ 41°F).
Below 18°C and above 28°C (64°F and above 82°F), the accuracy decreases by 0.1 times the specification per °C.
AC voltage and AC current RMS measurements are set at 5% to 100%.



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### Technical specifications

Function	Parameter	Fluke 317	Fluke 319
AC Current	Measurement	40.00 A	40.00 A
		600.0 A	600.0 A
			1000 A
	Resolution	0.01 A	0.01 A
		0.1 A	0.1 A
			1 A
	Precision	Accuracy 1.6% ± 6 digits (50-60 Hz) [40 A]	1.6% ± 6 digits (50-60 Hz) [40 A]
		2.5% ± 8 digits (60-500 Hz) [40 A]	2.5% ± 8 digits (60-500 Hz) [40 A]
		1.5% ± 5 digits (50-60 Hz) [600 A]	1.5% ± 5 digits (50-60 Hz) [600/1000 A]
		2.5 % ± 5 digits (60-500 Hz) [600 A]	2.5% ± 5 digits (60-500 Hz) [600/1000 A]
	When crest factor CF > 2, increase the specifications by 2%	For 500 A, maximum 3.0	For 500 A, maximum 3.0
		For 600 A, maximum 2.5	For 600 A, maximum 2.5
	AC response	RMS	RMS
DC Current	Range	40.00 A	40.00 A
		600.0 A	600.0 A
			1000 A
	Resolution	0.01 A	0.01 A
		0.1 A	0.1 A
			1 A
	Accuracy	1.6% ± 6 digits [40 A]	1.6% ± 6 digits [40 A]
		1.5% ± 5 digits [600 A]	
AC voltage	Range	600.0 V	
	Resolution	0.1V	
	Accuracy	1.5% ± 5 digits (20-500Hz)	
	AC response	RMS	
DC voltage	Range	600.0 V	
	Resolution	0.1 V	
	Accuracy	1% ± 4 digits	
Resistance	Measurement	400.0 Ω	
		4000 Ω	
	Resolution	0.1 Ω	
		1.0 Ω	
	Accuracy	1% ± 5 digits	
Continuity		≤ 30 Ω	
Inrush current	Integration time	NA	100 ms
Frequency	Measuring span	NA	5.0-500.0 Hz
	Accuracy	NA	0.5% ± 5 digits
	Power level	NA	10 - 100 Hz ≥ 5 A, 5 - 10 Hz, 100 - 500 Hz ≥ 10 A



### Fluke 317/319 True RMS Clamp Meters

- Slim clamps, lightweight body
- More suitable for use in narrow spaces
- Unique 40 A low frequency measurements capability with 0.01 A resolution, 1.6 % accuracy
- Inrush current measurement  
Measures electrical and lighting equipment start-up currents (Fluke 319)
- Frequency measurement  
Enables accurate measurement of PWM output signal frequency (Fluke 319)

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### Optional accessories

#### TL223 SureGrip electronics testing kit

One pair of silicone insulated test leads TL224, AC220 industrial alligator clips and TPI plane probe or TP4mm probe.

Category III 1000V. 10 A.



#### AC285 wide-opening alligator clips

A pair (red and black) of whole-edge banana-jack alligator clips.

Curved jaws, strong teeth and spring clasp.  
Opening: 20 mm.

Includes 4x AAA batteries.



#### L206 deluxe LED hat light

Can be fixed to a helmet baseball cap or even onto a door frame.

3 high brightness, long-life LEDs.

Fixed accessories.

40-hour battery life.

Includes 4x AAA batteries.



**Fluke.** *Keeping your world up and running.®*

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