

# The new Fluke 317

Portable, accurate and True RMS Clamp Meter Unique 40 milli-amps measurement precision testing functionality

### **Technical data**

The new Fluke 317 clamp meter is designed based on detailed research into the specific requirements of electrical engineers. The small clamp meter head and lightweight, compact body make it ideal for use in confined spaces. The 40A range low current measurement (0.01A resolution) design is unique and allows users to accurately measure small currents. At the same time, the clamp meter also has functions such as accurate, True RMS measurements, maximum/minimum values, zeroing, background light display, display protection and is a powerful tool in carrying out daily maintenance and installations.



#### **Functionality**

- The unique new features\* of the 40 milli-amps measurement High-precision current measurement--0.01A
- High-resolution, 1.6% high-precision measurements. (many engineers take small measurements more often than large current measurements)
- 6000 count display
- 4000  $\Omega$  resistance measurement
- Continuity testing  $\leq$  30  $\Omega$
- Clamp opening: 37mm
- The new clamp head is narrow and the body is compact and portable, making it ideal for use in confined spaces
- Alternating/ current (AC)/direct current (DC) testing
- Min/Max (minimum value / maximum value) feature on both current and voltage modes
- New zeroing feature\* sets the display to zero to perform (DC) testing
- True RMS
- · Large back light screen, convenient viewing
- $\bullet$  Screen 'Hold' function to hold measurement results on the screen
- Automatic off function prolongs battery life and ensures the instrument's continued availability.



| Fluke 317 Electr | ical Specifications                             |  |
|------------------|---|--|
| Function         | Parameter                                       | Fluke 317  |
| AC Current       | Range   | 40.00 A<br>600.0 A   |
|                  | Resolution                                      | 0.01 A<br>0.1 A  |
|                  | Accuracy  | 1.6 % $\pm$ 6 digit (50-60 Hz)<br>[40 A]<br>2.5 % $\pm$ 8 digit (60-500 Hz)<br>[40 A]<br>1.5 % $\pm$ 5 digit (50-60 Hz)<br>[600 A]<br>2.5 % $\pm$ 5 digit (60-500 Hz)<br>[600 A] |
|                  | Crest factor add<br>2 % into spec<br>for CF > 2 | 3.0 Max@ 500 A<br>2.5 Max@600 A  |
|                  | AC response                                     | RMS  |
| DC Current       | Range   | 40.00 A<br>600.0 A   |
|                  | Resolution                                      | 0.01 A<br>0.1 A  |
|                  | Accuracy  | 1.6 % ± 6 digit [40 A]<br>1.5 % ± 5 digit [600 A]  |
| AC voltage       | Range   | 600.0 V  |
|                  | Resolution                                      | 0.1 V  |
|                  | Accuracy  | 1.5 % ± 5 digit (20-500 Hz)  |
|                  | AC response                                     | RMS  |
| DC voltage       | Range   | 600.0 V  |
|                  | Resolution                                      | 0.1 V  |
|                  | Accuracy  | 1 % ± 4 digit  |
| Ω                | Range   | 400.0 Ω<br>4000 Ω  |
|                  | Resolution                                      | 0.1 Ω<br>1 Ω   |
|                  | Accuracy  | 1% ± 5 digits  |
| Continuity       |   | ≤ 30 Ω   |
| Inrush           | Integration Time                                | N/A  |
| HZ               | Range   | N/A  |
|                  | Resolution                                      | N/A  |
| -                |   |  |

General technical specifications

- Precision specifications apply within the temperature range of 23 °C  $\pm$  5 °C (73 °F  $\pm$  41 °F).
- Less than 18 °C and greater than 28 °C (64 °F and greater than 82 °F), precision decreases with °C by 0.1 litres of the specified values.
- AC voltage and AC current RMS measurements are set from 5 % to 100 %.

#### General specifications

- Digital display: 6000 digit resolution
- Safety rating: CE
- EN/IEC 61010-1 and IEC 61010-2-032
- Measurement types:600 V CAT III (Type 3)
- Power supply three AAA IEC LR03 batteries
- Clip opening maximum 37 mm (1.45 in)
- Jaw diameter 37 mm (1.45 in)
- Dimensions (length x width x height) 234 x 74 x 34.8 mm
- Weight: Approximately 384 g (13.5 oz)(including batteries)
- Calibrated and tested completely by hand
- Calibrated for one year

#### Environmental specifications

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

#### **Optional accessories**

- TL223 SureGrip electronics testing package
- AC285 SureGrip alligator clips
- L206 luxury LED cap lamp

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