

# FLUKE®

## Fluke 320 and 330 Series Clamp Meters

### Technical Data



- **Narrow body and jaw fit into small spaces**
- **Backlight available on most models**
- **Accurate low current measurements**
- **Inrush current feature on most models**
- **Auto shut-off**

#### **New Inrush Feature**

A new innovation from Fluke! Fluke Clamp Meters with the inrush feature measure motor starting current like a circuit breaker or overload unit sees it. One button lets you troubleshoot current surges that can cause nuisance tripping. Fluke's inrush feature gives you a synchronized reading of the current draw profile from motor start up.

For more information about Fluke's new inrush feature go to [www.fluke.com/330](http://www.fluke.com/330) to view *Inrush, A Technology Brief*.

# Choose the model that fits your work.

Looking for a clamp meter that's right for you? Match the functions and features listed below to the Fluke Clamp Meter best suited for your job.

## 321

AC Amps  
Ohms  
AC Volts  
Auto-Off  
Hold  
Compact








## 322

AC Amps  
Ohms  
AC Volts  
Auto-Off  
Hold  
Compact  
**DC Volts**



|  |                  |                             |
|--|------------------|-----------------------------|
| Measure ac current                           | 400.0 A          | 40.00 A<br>400.0 A          |
| Measure ac voltage                           | 400.0 V<br>600 V | 400.0 V<br>600 V            |
| Measure continuity                           | $\leq 30 \Omega$ | $\leq 30 \Omega$            |
| Measure dc voltage                           |                  | 400.0 V<br>600 V            |
| Higher resolution for loads below 40 amperes |                  | 0 - 40.00A<br>40.0 - 400.0A |
| Measure resistance                           | 400.0 $\Omega$   | 400.0 $\Omega$              |
| Measure inrush                               |                  |                             |
| Work in poorly lit areas                     |                  |                             |
| Measure non-linear loads                     |                  |                             |
| Measure dc current                           |                  |                             |
| Variable speed drives and stand-by power     |                  |                             |

| 333   | 334  | 335   | 336  | 337   |
|---|--|---|--|---|
| AC Amps<br>Ohms<br>AC Volts<br>Auto-Off<br>Hold<br><b>Full Size</b><br>DC Volts   | AC Amps<br>Ohms<br>AC Volts<br>Auto-Off<br>Hold<br>Full Size<br>DC Volts<br><b>In-rush</b><br><b>Backlight</b> | AC Amps<br>Ohms<br>AC Volts<br>Auto-Off<br>Hold<br>Full Size<br>DC Volts<br>In-rush<br>Backlight<br><b>True-rms</b> | AC Amps<br>Ohms<br>AC Volts<br>Auto-Off<br>Hold<br>Full Size<br>DC Volts<br>In-rush<br>Backlight<br>True-rms<br><b>DC Amps</b> | AC Amps<br>Ohms<br>AC Volts<br>Auto-Off<br>Hold<br>Full Size<br>DC Volts<br>In-rush<br>Backlight<br>True-rms<br>DC Amps<br><b>Frequency</b><br><b>Large Jaw</b><br><b>MIN/MAX</b> |
|  |                              |                                   |    |   |
| 400.0 A   | 600.0 A  | 600.0 A   | 600.0 A  | 999.9 A   |
| 600.0 V   | 600.0 V  | 600.0 V   | 600.0 V  | 600.0 V   |
| ≤ 30 Ω  | ≤ 30 Ω   | ≤ 30 Ω  | ≤ 30 Ω   | ≤ 30 Ω  |
| 600.0 V   | 600.0 V  | 600.0 V   | 600.0 V  | 600.0 V   |
| 600.0 Ω   | 6000 Ω   | 6000 Ω  | 6000 Ω   | 6000 Ω  |
|   | 100 mS   | 100 mS  | 100 mS   | 100 mS  |
|   | Backlight  | Backlight   | Backlight  | Backlight   |
|   |  | True-rms  | True-rms   | True-rms  |
|   |  |   | 600.0 A  | 999.9 A   |
|   |  |   |  | 400.0 Hz  |

**Specifications** (@23 °C + 5 °C RH 0 - 90%)

|                |                            | <b>Fluke 321</b>   | <b>Fluke 322</b>   | <b>Fluke 333</b>              | <b>Fluke 334</b>              | <b>Fluke 335</b>                                | <b>Fluke 336</b>  | <b>Fluke 337</b>  |
|----------------|----------------------------|--|--|-------------------------------|-------------------------------|---|---|---|
| ~<br><b>A</b>  | Range                      | 0 - 400.0 A  | 0 - 40.00 A<br>40.0 - 400.0 A  | 0 - 400.0 A                   | 0 - 600.0 A                   | 0 - 600.0 A                                     | 0 - 600.0 A   | 0 - 999.9 A   |
|                | Accuracy                   | 1.8% ± 5 counts<br>(50 - 60 Hz)<br>3.0% ± 5 counts<br>(60 Hz - 400 Hz) | 1.8% ± 5 counts<br>(50 - 60 Hz)<br>3.0% ± 5 counts<br>(60 Hz - 400 Hz) | 2% ± 5 counts<br>(50 - 60 Hz) | 2% ± 5 counts<br>(50 - 60 Hz) | 2% ± 5 counts<br>(50 - 60 Hz)                   | 2% ± 5 counts<br>(10 - 100 Hz)<br>6% ± 5 counts<br>(100 - 400 Hz) | 2% ± 5 counts<br>(10 - 100 Hz)<br>6% ± 5 counts<br>(100 - 400 Hz) |
|                | Crest Factor<br>(50/60 Hz) | -  | -  | -                             | -                             | 2.4 @ 500 A<br>2.0 @ 600 A<br>add 2% for C.F.>2 | 3 @ 500 A<br>2.5 @ 600 A<br>add 2% for C.F.>2                     | 3 @ 500 A<br>2.5 @ 600 A<br>1.42 @ 1000 A<br>add 2% for C.F.>2    |
|                | AC Response                | Averaging  | Averaging  | Averaging                     | Averaging                     | True-rms  | True-rms  | True-rms  |
| Inrush         | Integration Time           | -  | -  | -                             | 100 mS                        | 100 mS  | 100 mS  | 100 mS  |
| -<br><b>A</b>  | Range                      | -  | -  | -                             | -                             | -   | 0 - 600.0 A   | 0 - 999.9 A   |
|                | Accuracy                   | -  | -  | -                             | -                             | -   | 2% + 3 counts   | 2% + 3 counts   |
| ~<br><b>V</b>  | Range                      | 0 - 400.0 V<br>0 - 600 V   | 0 - 400.0 V<br>0 - 600 V   | 0 - 600.0 V                   | 0 - 600.0 V                   | 0 - 600.0 V                                     | 0 - 600.0 V   | 0 - 600.0 V   |
|                | Accuracy                   | 1.2% + 5 counts<br>(50 - 400 Hz)                                       | 1.2% + 5 counts<br>(50 - 400 Hz)                                       | 1% + 5 counts<br>(50/60 Hz)   | 1% + 5 counts<br>(50/60 Hz)   | 1% + 5 counts<br>(50/60 Hz)                     | 1% + 5 counts<br>(20 - 100 Hz)<br>6% + 5 counts<br>(100 - 400 Hz) | 1% + 5 counts<br>(20 - 100 Hz)<br>6% + 5 counts<br>(100 - 400 Hz) |
|                | AC Response                | Averaging  | Averaging  | Averaging                     | Averaging                     | True-rms  | True-rms  | True-rms  |
| -<br><b>V</b>  | Range                      | -  | 0 - 400.0 V<br>0 - 600 V   | 0 - 600.0 V                   | 0 - 600.0 V                   | 0 - 600.0 V                                     | 0 - 600.0 V   | 0 - 600.0 V   |
|                | Accuracy                   | -  | 1% + 5 counts  | 1% + 5 counts                 | 1% + 5 counts                 | 1% + 5 counts                                   | 1% + 5 counts   | 1% + 5 counts   |
| Ω              | Range                      | 0 - 400.0 Ω  | 0 - 400.0 Ω  | 0 - 600.0 Ω                   | 0 - 600.0 Ω<br>601 - 6000 Ω   | 0 - 600.0 Ω<br>601 - 6000 Ω                     | 0 - 600.0 Ω<br>601 - 6000 Ω                                       | 0 - 600.0 Ω<br>601 - 6000 Ω                                       |
|                | Accuracy                   | 1% ± 5 counts  | 1% ± 5 counts  | 1.5% ± 5 counts               | 1.5% ± 5 counts               | 1.5% ± 5 counts                                 | 1.5% ± 5 counts   | 1.5% ± 5 counts   |
| Continuity     |                            | ≤ 30 Ω   | ≤ 30 Ω   | ≤ 30 Ω                        | ≤ 30 Ω                        | ≤ 30 Ω  | ≤ 30 Ω  | ≤ 30 Ω  |
| <b>Hz</b>      | Range                      | -  | -  | -                             | -                             | -   | -   | 5.0 - 400.0 Hz  |
|                | Accuracy                   | -  | -  | -                             | -                             | -   | -   | 0.5% ± 5 counts   |
|                | Trigger Level              | -  | -  | -                             | -                             | -   | -   | 10 - 100 Hz ≥ 5 A<br>5 - 10 Hz,<br>100 - 400 Hz ≥ 10 A            |
| MIN/MAX        |                            | No   | No   | No                            | No                            | No  | No  | Yes   |
| Backlight      |                            | No   | No   | No                            | No                            | Yes   | Yes   | Yes   |
| Display Hold   |                            | Yes  | Yes  | Yes                           | Yes                           | Yes   | Yes   | Yes   |
| Size           | Height                     | 7.5"   | 7.5"   | 9.375"                        | 9.375"                        | 9.375"  | 9.875"  | 9.875"  |
|                | Width                      | 2.5"   | 2.5"   | 3.125"                        | 3.125"                        | 3.125"  | 3.125"  | 3.125"  |
|                | Depth                      | 1.4"   | 1.4"   | 1.625"                        | 1.625"                        | 1.625"  | 1.625"  | 1.625"  |
|                | Jaw Opening                | 1" (25.4 mm)   | 1" (25.4 mm)   | 1.2" (30.5 mm)                | 1.2" (30.5 mm)                | 1.2" (30.5 mm)                                  | 1.2" (30.5 mm)  | 1.2" (30.5 mm)  |
| Max. Wire Size |                            | 500 MCM  | 500 MCM  | 750 MCM                       | 750 MCM                       | 750 MCM   | 750 MCM or<br>two 500 MCM   | 750 MCM or<br>two 500 MCM   |
| Weight         |                            | 8 oz.  | 8 oz.  | 11 oz.                        | 11 oz.                        | 11 oz.  | 11 oz.  | 11 oz.  |

**Models 321 and 322**

**Operating temperature**

-14 °F to 122 °F  
(-10 °C to 50 °C)

**Altitude**

2,000 meters

**Battery life**

(2) AAA carbon zinc approximately 100 hours continuous, automatic low battery indicator

**Safety rating**

IEC 1010-2-031, 600 V CAT III

**Temperature de-rating**

< 18 °C, > 28 °C add 0.1 x specified accuracy / °C

**Storage temperature**

-22 °F to 140 °F (-30 °C to 60 °C)

**Warranty**

Two years

**Models 333, 334, 335, 336 and 337**

**Operating temperature**

-14 °F to 122 °F  
(-10 °C to 50 °C)

**Altitude**

2,500 meters

**Battery life**

(2) AA alkaline approximately 150 hours continuous, automatic low battery indicator

**Safety rating**

IEC 1010-2-031, 600 V CAT III

**Temperature de-rating**

Add 0.1 x specified accuracy for each °C above 28 °C or below 18 °C

**Storage temperature**

-40 °F to 140 °F  
(-40 °C to 60 °C)

**Warranty**

Three years

**Need Technical Assistance?**

Call 1-800-44-FLUKE toll free in the U.S. or (800) 36-FLUKE in Canada or (425) 446-5500 in other countries.



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

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