

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 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 400.0 A
Measure ac voltage	400.0 V 600 V	400.0 V 600 V
Measure continuity	$\leq 30 \Omega$	$\leq 30 \Omega$
Measure dc voltage		400.0 V 600 V
Higher resolution for loads below 40 amperes		0 - 40.00A 40.0 - 400.0A
Measure resistance	400.0 Ω	400.0 Ω
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 Ohms AC Volts Auto-Off Hold Full Size DC Volts	AC Amps Ohms AC Volts Auto-Off Hold Full Size DC Volts In-rush Backlight	AC Amps Ohms AC Volts Auto-Off Hold Full Size DC Volts In-rush Backlight True-rms	AC Amps Ohms AC Volts Auto-Off Hold Full Size DC Volts In-rush Backlight True-rms DC Amps	AC Amps Ohms AC Volts Auto-Off Hold Full Size DC Volts In-rush Backlight True-rms DC Amps Frequency Large Jaw MIN/MAX
				
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
$\leq 30\ \Omega$	$\leq 30\ \Omega$	$\leq 30\ \Omega$	$\leq 30\ \Omega$	$\leq 30\ \Omega$
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%)

		Fluke 321	Fluke 322	Fluke 333	Fluke 334	Fluke 335	Fluke 336	Fluke 337
~ A	Range	0 - 400.0 A	0 - 40.00 A 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 (50 - 60 Hz) 3.0% ± 5 counts (60 Hz - 400 Hz)	1.8% ± 5 counts (50 - 60 Hz) 3.0% ± 5 counts (60 Hz - 400 Hz)	2% ± 5 counts (50 - 60 Hz)	2% ± 5 counts (50 - 60 Hz)	2% ± 5 counts (50 - 60 Hz)	2% ± 5 counts (10 - 100 Hz) 6% ± 5 counts (100 - 400 Hz)	2% ± 5 counts (10 - 100 Hz) 6% ± 5 counts (100 - 400 Hz)
	Crest Factor (50/60 Hz)	—	—	—	—	2.4 @ 500 A 2.0 @ 600 A add 2% for C.F.>2	3 @ 500 A 2.5 @ 600 A add 2% for C.F.>2	3 @ 500 A 2.5 @ 600 A 1.42 @ 1000 A 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
-- A	Range	—	—	—	—	—	0 - 600.0 A	0 - 999.9 A
	Accuracy	—	—	—	—	—	2% + 3 counts	2% + 3 counts
	AC Response	Averaging	Averaging	Averaging	Averaging	True-rms	True-rms	True-rms
~ V	Range	0 - 400.0 V 0 - 600 V	0 - 400.0 V 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 (50 - 400 Hz)	1.2% + 5 counts (50 - 400 Hz)	1% + 5 counts (50/60 Hz)	1% + 5 counts (50/60 Hz)	1% + 5 counts (50/60 Hz)	1% + 5 counts (20 - 100 Hz) 6% + 5 counts (100 - 400 Hz)	1% + 5 counts (20 - 100 Hz) 6% + 5 counts (100 - 400 Hz)
	AC Response	Averaging	Averaging	Averaging	Averaging	True-rms	True-rms	True-rms
-- V	Range	—	0 - 400.0 V 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 601 - 6000 Ω	0 - 600.0 Ω 601 - 6000 Ω	0 - 600.0 Ω 601 - 6000 Ω	0 - 600.0 Ω 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
Hz	Range	—	—	—	—	—	—	5.0 - 400.0 Hz
	Accuracy	—	—	—	—	—	—	0.5% ± 5 counts
	Trigger Level	—	—	—	—	—	—	10 - 100 Hz ≥ 5 A 5 - 10 Hz, 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 two 500 MCM	750 MCM or 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
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Fluke. Keeping your world
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