

**FLUKE®**

**Fluke Clamp Meters  
Solutions for every need**

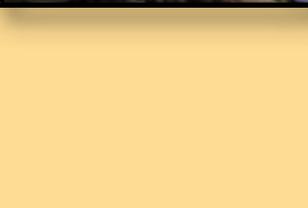


# Clamp Meter selection chart

Job functions		Applications
	<b>Electrical Contractor</b>	<b>Working on panels and branch circuits</b> <ul style="list-style-type: none"> <li>• Measure loads on a branch circuit at a panel (including feeder cables, branch circuits, and neutrals) and the continuity of switches, fuses, and contacts</li> <li>• Measure load side voltage of a breaker or fuse</li> <li>• Check if a circuit is live before beginning work</li> </ul>
	<b>Facility Maintenance</b>	
	<b>Commercial Electrician</b>	
	<b>Commercial Electrical Contractor</b>	<b>Verify circuit integrity and operation</b> <ul style="list-style-type: none"> <li>• Measure load current, ac voltage and continuity of switches, fuses, and contacts</li> </ul> <b>Feeder Cables</b> <ul style="list-style-type: none"> <li>• Check balance and loading of feeder cables</li> </ul>
	<b>Industrial Electrical Contractor</b>	
	<b>Plant Maintenance</b>	
	<b>Electrical Contractor</b>	<b>Working with motors and drives</b> <ul style="list-style-type: none"> <li>• Measure motor start-up and run current</li> <li>• Measure the output of variable speed motors and drives</li> </ul> <b>In and around the service panel</b> <ul style="list-style-type: none"> <li>• Clamp around busbar or conductors to measure loads and line frequency in circuits and feeders</li> </ul> <b>Measure ac or dc current</b> <ul style="list-style-type: none"> <li>• Measure ac or dc for use in battery-operated systems like UPS or other dc systems</li> </ul>
	<b>Commercial Electrician</b>	
	<b>Plant Maintenance</b>	
	<b>Industrial Electrician</b>	
	<b>Industrial Service Electrician</b>	<b>Service panel, service entrance, and low voltage vaults</b> <ul style="list-style-type: none"> <li>• In the service panel, clamp around each individual phase. (Good for large single or parallel conductors)</li> <li>• In the service entrance, clamp around busbars, up to 2.5 in, to verify expected current usage</li> <li>• Measure current in conductors of low-voltage vaults (1000 V or less)</li> </ul> <b>Working with large loads</b> <ul style="list-style-type: none"> <li>• Verify operation of large load service panels, switchgears, large current DC systems, and motors</li> </ul>
	<b>Electrical Contractor</b>	
	<b>Electric Utility Technician</b>	
	<b>Marine or Welding Electrician</b>	
	<b>Facility Maintenance Electrician</b>	
	<b>HVAC/R Service Technician</b>	<b>Checking boilers and furnaces</b> <ul style="list-style-type: none"> <li>• Capture flue gas temperatures and perform flame rod testing</li> </ul> <b>HVAC Motors and drives</b> <ul style="list-style-type: none"> <li>• Measure start and run motor capacitors</li> <li>• Troubleshoot compressor electrical motor faults</li> <li>• Measure performance of variable frequency drives</li> </ul> <b>Testing electrical performance</b> <ul style="list-style-type: none"> <li>• Measure load-side and supply-side current and voltage</li> <li>• Measure current and voltage phase balance on 3 phase systems</li> </ul>

# Speciality clamp meters

Key features	Recommended Clamp
<ul style="list-style-type: none"> <li>Open Jaw ac current measurement to 100 A</li> <li>AC and DC voltage</li> <li>T5-600: CAT III 600 V ac/dc</li> <li>T5-1000: CAT III 1000 V ac/dc, CAT IV 600 V ac/dc</li> <li>Continuity, resistance</li> <li>Rugged and easy to use</li> </ul>	<p><b>T5-1000</b> CAT III 1000 V Others in the family: T5-600</p> 
<ul style="list-style-type: none"> <li>Measure up to 400 A ac</li> <li>0.01 A resolution in the 40 A range for more precise measurements</li> <li>Compact form factor to make measurements easily in tight cable compartments</li> <li>Measure ac and dc voltage to 600 V</li> <li>Resistance, continuity, and display hold functions</li> </ul>	<p><b>322</b> CAT III 600 V Others in the family: 321</p> 
<ul style="list-style-type: none"> <li>Inrush current mode for repeatable measurement of motor or equipment start-up current</li> <li>Narrow, elongated jaw with large opening easily singles out the conductor of interest</li> <li>True-rms to more accurately measure the actual current, even with distorted wave-forms caused by noisy loads</li> <li>Includes large backlit display, frequency, ac and dc voltage, resistance, continuity, and min/max</li> </ul>	<p><b>337</b> CAT III 600 V Others in the family: 333, 334, 335 and 336</p> 
<ul style="list-style-type: none"> <li>Up to 2000 A dc, 1400 A ac current measurement</li> <li>Large jaw suitable for single or multiple large conductors</li> <li>Cat IV 600 V rated for maximum application versatility</li> <li>Inputs for 600 V ac, 1000 V dc, 400 K<math>\Omega</math> resistance, and continuity</li> <li>Low pass filter, min/max/avg, and inrush current</li> <li>Accurately measure frequency of current and voltage up to 1 kHz</li> </ul>	<p><b>355</b> CAT IV 600 V, CAT III 1000 V Others in the family: 353</p> 
<ul style="list-style-type: none"> <li>Measure current up to 600 A ac and up to 200 <math>\mu</math>A dc</li> <li>Measure true-rms voltage, capacitance, resistance, and continuity</li> <li>Measure contact temperature with included Type-K temperature probe. (Or measure the outside temperature of a pipe with the 80PK-8 Pipe Clamp Temperature Probe (sold separately))</li> </ul>	<p><b>902</b> 600 V CAT III</p> 

Job functions	
	<p>Facility Maintenance Electrician</p>
	<p>Hospital Electrician</p>
	<p>Electrical Contractor</p>
	<p>Industrial/Commercial Maintenance Electrician</p>
	<p>Utility Technician</p>
	<p>Electrical Contractor/Consultant</p>
	<p>Process Technician/Electrician</p>
	<p>Automation Specialist/Commercial Electrician</p>
	<p>Electrical and Field Service Technician</p>
	<p>HVAC/R Technician</p>
	<p>Electrical Engineer</p>
	<p>Commercial Electrician</p>
	<p>Facility Maintenance Electrician</p>
	<p>Electric Utility Engineer</p>

Applications	Key features	Recommended Clamp
<p><b>Measuring leakage current</b></p> <ul style="list-style-type: none"> <li>• Check insulation condition and leakage of circuits and systems</li> <li>• Check for leakage in circuits and systems utilizing filters</li> </ul> <p><b>Testing insulation on live circuits</b></p> <ul style="list-style-type: none"> <li>• Evaluate insulation condition on live circuits via leakage current measurements where disconnection is highly inconvenient</li> </ul>	<ul style="list-style-type: none"> <li>• Measurement of leakage current with 3 mA range and 1 <math>\mu</math>A of resolution, for accurate monitoring of insulation erosion</li> <li>• Broad range of measurement, from 1 <math>\mu</math>A up to 60 A, for all installation needs</li> <li>• Advanced shielding to ensure accurate results when measuring near other conductors</li> <li>• Easy-to-carry, pocket-sized leakage current tester with wide 40 mm (1.5 in) jaw size</li> </ul>	<p><b>360*</b> CAT III 300 V</p> 
<p><b>Grounding and bonding resistance testing</b></p> <ul style="list-style-type: none"> <li>• Perform ground loop tests in areas where other ground resistance test techniques are not available</li> <li>• Test parts of a multi-grounded system</li> <li>• Periodically perform quick tests on system grounds as part of a regular preventative maintenance program</li> </ul>	<ul style="list-style-type: none"> <li>• Measure from 0.025 <math>\Omega</math> to 1500 <math>\Omega</math> ground loop resistance.</li> <li>• Large jaw for clamping around the widest range of ground conductors or grounding bars</li> <li>• Measure ground leakage and ac load currents from 0.2 mA all the way up to 30 A</li> <li>• User defined alarm limits for rapid pass/fail type measurements</li> </ul>	<p><b>1630</b> CAT III 300 V</p> 
<p><b>Measuring process control signals</b></p> <ul style="list-style-type: none"> <li>• Measures 4–20 mA signals without breaking the loop</li> <li>• Check correct operation of PLCs and control systems analog I/O</li> </ul>	<ul style="list-style-type: none"> <li>• Saves time and money by easily measuring 4–20 mA signals</li> <li>• Detachable miniature clamp for tight locations</li> <li>• Also measure older 10 to 50 mA signal systems with the 100 mA range</li> <li>• Backlit display, spotlight, display hold, and zero reading buttons</li> </ul>	<p><b>771</b> CAT II 300 V</p> 
<p><b>Measuring non-linear loads</b></p> <ul style="list-style-type: none"> <li>• Setup and troubleshoot variable frequency drives and UPS systems—Verify correct operation by measuring key power quality parameters</li> </ul> <p><b>Harmonic measurements</b></p> <ul style="list-style-type: none"> <li>• Uncover harmonic issues that can damage or disrupt critical equipment</li> </ul> <p><b>Troubleshooting start-up current issues</b></p> <ul style="list-style-type: none"> <li>• Check start-up current where spurious resets or nuisance circuit breaker tripping occurs</li> </ul> <p><b>Load studies</b></p> <ul style="list-style-type: none"> <li>• Verify electrical system capacity before adding loads</li> </ul>	<ul style="list-style-type: none"> <li>• AC/DC current: Clamp-on measurement of current up to 1400 A ac rms and 2000 A dc</li> <li>• Highest safety rating: CAT IV 600 V rated for use at the service entrance</li> <li>• Accurate in noisy environments: Using low-pass filter, the clamp meter performs even with distorted waveforms</li> <li>• Data logging: Identify intermittent faults by logging any power quality parameter for minutes, or over a month</li> <li>• Troubleshoot harmonics: Analyze and log harmonics digitally or graphically</li> <li>• Inrush current: Capture and analyze nuisance tripping, from 3 seconds to 300 seconds</li> </ul>	<p><b>345</b> CAT IV 600 V, CAT III 1000 V</p> 

\*Not available for sale in Canada

Need more help choosing a clamp meter to fit your needs? Go interactive! Visit [www.fluke.com/clamps](http://www.fluke.com/clamps) and use our on-line selection guide to find the right clamp solution for you!

# Clamp meters designed for the way you work.

	Commercial/industrial electrician		Residential/commercial electrician		General purpose		
	T5-600 	T5-1000 	321 	322 	333 	334 	335 
<b>Measurements</b>							
AC current	•	•	•	•	•	•	•
AC volts	•	•	•	•	•	•	•
Resistance	•	•	•	•	•	•	•
Continuity	•	•	•	•	•	•	•
DC Volts	•	•		•	•	•	•
DC current							
True-rms							•
Frequency							
Min/Max/Avg							
4-20 mA (0.01 mA resolution)							
Temperature							
Capacitance							
Earth ground loop resistance							
<b>Special features</b>							
Inrush current mode						•	•
Low Pass filter							
Harmonics, power, and data logging							
<b>Display</b>							
Display hold	•	•	•	•	•	•	•
Backlight							•
Graphing display							
<b>Specifications</b>							
Jaw opening	12.9 mm (0.5 in)	12.9 mm (0.5 in)	25.4 mm (1.0 in)	25.4 mm (1.0 in)	30.5 mm (1.2 in)	30.5 mm (1.2 in)	30.5 mm (1.2 in)
Max wire size	1/0 THHN Cable	1/0 THHN Cable	500 MCM	500 MCM	750 MCM	750 MCM	750 MCM
Current range ac rms	0 to 100 A	0 to 100 A	0 to 400 A	0 to 400 A	0 to 400 A	0 to 600 A	0 to 600 A
Accuracy ac current (50/60 Hz)	3 % ± 3 counts	3 % ± 3 counts	1.8 % ± 5 counts	1.8 % ± 5 counts	2 % ± 5 counts	2 % ± 5 counts	2 % ± 5 counts
AC Response	Averaging	Averaging	Averaging	Averaging	Averaging	Averaging	True-rms
Current range dc							
Accuracy dc current							
Voltage range ac	0 to 600 V	0 to 1000 V	0 to 600 V	0 to 600 V	0 to 600 V	0 to 600 V	0 to 600 V
Accuracy ac voltage	1.5 % ± 2 counts	1.5 % ± 2 counts	1.2 % + 5 counts	1.2 % + 5 counts	1 % + 5 counts	1 % + 5 counts	1 % + 5 counts
Voltage range dc	0 to 600 V	0 to 1000 V		0 to 600 V	0 to 600 V	0 to 600 V	0 to 600 V
Accuracy dc voltage	1 % ± 1 count	1 % ± 1 count		1 % + 5 counts	1 % + 5 counts	1 % + 5 counts	1 % + 5 counts
Resistance range	0 to 1000 Ω	0 to 1000 Ω	0 to 400 Ω	0 to 400 Ω	0 to 600 Ω	0 to 6000 Ω	0 to 6000 Ω
Frequency measurement range							
<b>Unit power</b>							
Auto off	•	•	•	•	•	•	•
<b>Warranty and safety</b>							
Warranty (years)	2	2	2	2	3	3	3
Category ratings (EN61010-1)	CAT III 600 V	CAT IV 600 V, CAT III 1000 V	CAT III 600 V	CAT III 600 V	CAT III 600 V	CAT III 600 V	CAT III 600 V

See our full line of Fluke Accessories  
at [www.fluke.com/accy-catalog](http://www.fluke.com/accy-catalog)



