

AC CURRENT CLAMPS

AC Current Clamp Specifications

	i200	i200s	i400	i400s	i800	i1000s	i3000s	i2000 Flex	i3000s Flex	i6000s
AC current range	1 A to 200 A	1 A to 200 A	1 A to 400 A	0.5 A to 400 A	1 A to 800 A	0.2 A to 1000 A	1 A to 3000 A	2 A to 2000 A	3 A to 3000 A	60 A to 6000 A
Accuracy	3% + 0.5 A 48 Hz to 65 Hz	1% + 0.5 A 48 Hz to 65 Hz	2% + 0.06 A 45 Hz to 400 Hz	0.5 A to 40 A, 2% + 0.01 A, 5 A to 400 A, 2% + 0.04 A, 45 Hz to 400 Hz	0.1 A to 10 A ±3% + 0.01 A, 10 A to 200 A ±2%, 200 A to 800 A ±1%	0.2 to 10 A: 3% + 0.1 A 10 A to 100 A: 2% + 0.5 A 100 A to 1000 A: 1% + 1 A 48 Hz to 65 Hz	1 to 30 A: 2% + 0.1 A 1 to 300 A: 2% + 0.5 A 1 to 3000 A: 2% + 2 A 48 Hz to 65 Hz	±1% of range 45 Hz to 65 Hz Ranges: 20 A, 200 A, 2000 A	±1% of range, 45 Hz to 65 Hz Ranges: 30 A, 300 A, 3000 A	±1% of range 45 Hz to 65 Hz
Bandwidth (-3 dB)	40 Hz to 40 kHz	40 Hz to 40 kHz	5 kHz to 20 kHz	5 Hz to 10 kHz	30 Hz to 10 kHz (typical)	5 Hz to 100 kHz	10 Hz to 100 kHz	10 Hz to 20 kHz	10 Hz to 50 kHz	10 Hz to 50 kHz
Maximum conductor diameter	20 mm	20 mm	32 mm	32 mm	54 mm	54 mm	64 × 100 mm	177 mm	177 mm or 265 mm	193 mm or 289 mm
Maximum conductor size	150 mm ²	150 mm ²	400 mm ²	400 mm ²	2 × 240 mm ² or 1 × 500 mm ²	2 × 240 mm ² or 1 × 500 mm ²	64 mm	610 mm circumference	610 mm or 915 mm circumference	610 mm or 915 mm
Output levels	1 mA/A	10 mV/A 100 mV/A	1 mA/A	10 mV/A 1 mV/A	1 mA/A	1 mV/A 10 mV/A 100 mV/A	10 mV/A 1 mV/A 0.1 mV/A	100 mV/A 10 mV/A 1 mV/A	100 mV/A 10 mV/A 1 mV/A	50 mV/A 5 mV/A 0.5 mV/A
Output cable	1.5 m shrouded banana plugs	2 m to BNC termination	1.5 m shrouded banana plugs	2.5 m to BNC termination	1.6 m shrouded banana plugs	1.6 m to BNC termination	2.1 m to BNC termination	2 m with double shrouded banana plugs	2.1 m to BNC termination	2 m to BNC, 4 mm plug adapter supplied
Warranty	One-year	One-year	One-year	One-year	One-year	One-year	One-year	One-year	One-year	One-year
Safety rating	CAT III 600 V	CAT III 600 V	CAT III 1000 V CAT IV 600 V	CAT III 1000 V CAT IV 600 V	CAT III 600 V	CAT III 600 V	CAT III 600 V	CAT III 600 V	CAT III 600 V	CAT III 600 V

AC Current Clamp Selection Guide

	i200	i200s	i400	i400s	i800	i1000s	i3000s	i2000 Flex ¹	i3000s Flex
110/114/116		1 A to 200 A		0.6 A to 400 A*		0.6 A to 1000 A*	1 A to 3000 A	2 A to 2000 A	3 A to 3000 A
115/117	60 A to 200 A	1 A to 200 A	60 A to 400 A	0.6 A to 400 A*	60 A to 800 A	0.6 A to 1000 A*	1 A to 3000 A	2 A to 2000 A	3 A to 3000 A
233	60 A to 200 A	1 A to 200 A	60 A to 400 A	0.6 A to 400 A*	60 A to 800 A	0.6 A to 1000 A*	1 A to 3000 A	2 A to 2000 A	3 A to 3000 A
27 II	2 A to 200 A	1 A to 200 A	2 A to 400 A	1 A to 400 A*	2 A to 800 A	0.1 A to 1000 A*	1 A to 3000 A	2 A to 2000 A	3 A to 3000 A
28 II	1.8 A to 200 A	1 A to 200 A	1.8 A to 400 A	1.8 A to 400 A*	1.8 A to 800 A	0.2 A to 1000 A*	2 A to 3000 A	2 A to 2000 A	3 A to 3000 A
77 IV		1 A to 200 A		1 A to 400 A*		0.1 A to 1000 A*	1 A to 3000 A	2 A to 2000 A	3 A to 3000 A
175/177/179	3 A to 200 A	1 A to 200 A	3 A to 400 A	1 A to 400 A*	3 A to 800 A	0.3 A to 1000 A*	3 A to 3000 A	2 A to 2000 A	3 A to 3000 A
1577/1587 FC	3 A to 200 A	1 A to 200 A	3 A to 400 A	3 A to 400 A*	3 A to 400 A	0.3 A to 1000 A*	3 A to 3000 A	2 A to 2000 A	3 A to 3000 A
83V/88V	2 A to 200 A	1 A to 200 A	2 A to 400 A	1 A to 400 A*	2 A to 800 A	0.1 A to 1000 A*	1 A to 3000 A	2 A to 2000 A	3 A to 3000 A
87V	2 A to 200 A	1 A to 200 A	2 A to 400 A	2 A to 400 A*	2 A to 800 A	0.2 A to 1000 A*	2 A to 3000 A	2 A to 2000 A	3 A to 3000 A
287/289	1 A to 200 A	1 A to 200 A	1 A to 400 A	0.5 A to 400 A*	1 A to 800 A	0.2 A to 1000 A*	1 A to 3000 A	2 A to 2000 A	3 A to 3000 A
43B		1 A to 200 A		0.35 A to 400 A		0.1 A to 1000 A	1 A to 3000 A	2 A to 2000 A	3 A to 3000 A
434/435-II		1 A to 200 A		1.2 A to 400 A		0.3 A to 1000 A	1.2 A to 3000 A	i430Flex-TF-II	i430Flex-TF-II
120/B		1 A to 200 A		2.5 A to 400 A		0.25 A to 1000 A	2.5 A to 3000 A	2 A to 2000 A	3 A to 3000 A
190/-II		1 A to 200 A		1 A to 400 A		0.1 A to 1000 A	1 A to 3000 A	2 A to 2000 A	3 A to 3000 A
8808A	1 A to 200 A	1 A to 200 A	1 A to 400 A	0.5 A to 400 A*	1 A to 800 A	0.1 A to 1000 A*	1 A to 3000 A	2 A to 2000 A*	3 A to 3000 A*
8845A/8846A	1 A to 200 A	1 A to 200 A	1 A to 400 A	1 A to 400 A*	1 A to 800 A	0.2 A to 1000 A*	1 A to 3000 A	2 A to 2000 A*	3 A to 3000 A*
787B/789	50 A to 200 A	1 A to 200 A	50 A to 400 A	2 A to 400 A*	50 A to 440 A	0.2 A to 1000 A*	2 A to 3000 A	2 A to 2000 A	3 A to 3000 A

AC Current Clamps



i800 AC Current Clamp

This AC current clamp is designed to extend the current measuring capability of a digital multimeter to 800 A AC. It is compatible with a digital multimeter that accepts shrouded 4 mm banana plugs and has an AC milliamp range.

- Current range: 100 mA to 800 A RMS AC
- Frequency range: 30 Hz to 10 kHz (-3 dB)
- Safety rating: CAT III 600 V



i400 AC Current Clamp

This high-safety current clamp for digital multimeters is a single range 400 A AC clamp that is designed to offer maximum utility in a very compact shape. The division ratio is 1000:1.

- Current range: 1 A to 400 A AC
- Frequency range: 5 kHz to 20 kHz (-3 dB)
- Safety rating: CAT IV 600 V, CAT III 1000 V



i400s AC Current Clamp

This high-safety compact current clamp with BNC output is a companion to a ScopeMeter® or Power Quality Meter to measure up to 400 A AC.

- Current range: 0.5 A to 400 A AC
- Frequency range: 5 Hz to 10 kHz (-3 dB)
- Optional PM9081/001 Dual Banana Plug Male to Female BNC Adapter is available for digital multimeters
- Safety rating: CAT IV 600 V, CAT III 1000 V



i200 AC Current Clamp

This small-sized, single-range current clamp features safety-shrouded 4mm banana plugs. It is compatible with most Digital Multimeters and other current measurement devices that accept shrouded 4 mm banana plugs and have an AC milliamp range.

- Current range: 1 A to 200 A AC
- Frequency range: 40 Hz to 40 kHz
- Safety rating: CAT III 600 V



i200s AC Current Clamp

This small-sized dual-range current clamp offers voltage output using a safety-insulated BNC connector. A dual banana-to-BNC adapter allows the clamp to be connected to meters with banana inputs.

- Current ranges: 0.1 A and 200 A AC switchable
- Frequency range: 40 Hz to 10 kHz
- Safety rating: CAT III 600 V



i2000 Flex AC Current Clamp

This current probe can be used to measure currents up to 2000 A when used in conjunction with multimeters, recorders, or data loggers. The flexible and lightweight measuring head allows quick and easy installation on thick and hard-to-reach areas.

- Current range: 20 A, 200 A, and 2000 A AC switchable
- Frequency range: 10 Hz to 20 kHz
- Safety rating: CAT III 600 V



i1000s AC Current Clamp

This large AC current clamp expands applications in industrial and power environments by connecting directly to an oscilloscope using a reinforced coaxial cable and an insulated BNC connector. It is ideal for measuring distorted current waveform RMS and harmonics.

- Current range: 0.1 A to 1000 A AC
- Frequency range: 10 Hz to 100 kHz
- Accurate displays due to a passive filter that eliminates noise and ring on rapidly-rising di/dt waveforms
- Safety rating: CAT III 600 V



i3000s AC Current Clamp

This AC current clamp is designed as a clamp-on unit for use with Oscilloscopes. It also includes a dual banana to BNC adapter for use with multimeters with 4mm banana input plugs.

- Current range: 1 A to 3000 A
- Frequency range: 10 Hz to 100 kHz
- Safety rating: CAT III 600 V



i3000s Flex-24 or -36 AC Current Clamp

i3000s Flex-24 is available in a convenient four-pack (i3000s Flex 4 Pack)

The flex clamp uses the Rogowski (air-cored coil) principle and can be used to measure three ranges of currents up to 3000 A when used in conjunction with oscilloscopes, recorders or data loggers. The flexible and lightweight measuring head allows quick and easy installation in hard-to-reach areas without batteries or an external power source. This clamp fits around large conductors and is available in 610 mm and 914 mm lengths.

- Current range: 30 A, 300 A, and 3000 A switchable
- Frequency range: 10 Hz to 50 kHz
- Safety rating: CAT III 600 V



i5s AC Current Clamp

Also available in a convenient three-pack (i5sPQ3)

This compact 5 A AC clamp, specially configured to provide low-current accuracy while taking measurements on secondary current transformers, expands the use of Fluke 430 Series Three-Phase Power Quality Analyzers.

- Current range: 10 mA to 5 A
- Frequency range: 40 Hz to 5 kHz
- Safety rating: CAT III 600 V (for insulated conductors only)



i6000s Flex-24 or -36 AC Current Clamp

This AC current clamp with its flexible and lightweight measuring head allows quick and easy installation in hard-to-reach areas without batteries or an external power source. This clamp fits around large conductors and is available in both 610 mm and 914 mm lengths.

- Current range: 60 A, 600 A, and 6000 A switchable
- Frequency range: 10 Hz to 50 kHz (-3 dB)
- Safety rating: CAT III 600 V

AC/DC CURRENT CLAMPS

AC/DC Current Clamp Specifications

	80i-110s	i410	i1010	i30	i30s	i310s
DC range	0.1 A to 100 A	1 A to 400 A	1 A to 1000 A	30 mA to 30 A	30 mA to 30 A	0.1 A to 450 A
AC range	0.1 A to 70 A	1 A to 400 A	1 A to 600 A	30 mA to 20 A RMS	30 mA to 20 A RSM	0.1 A to 300 A
Accuracy	0.1 A to 10 A; AC to 1 kHz: $\pm 3\% + 50$ mA; up to 100 A add 15%; up to 20 kHz add 12%	3.5% + 0.5 A for DC or AC (45 to 400 Hz)	2% + 0.5 A for DC or AC (45 to 400 Hz)	$\pm 1\%$ of reading, ± 2 mA	$\pm 1\%$ of reading, ± 2 mA	30 A range: 1% + 50 mA 300 A range: 1% + 300 mA
Bandwidth (-3 dB)	100 kHz	3 kHz	10 kHz	dc to 20 kHz (-0.5 dB)	dc to 100 kHz (-0.5 dB)	dc to 20 kHz
Zero error adjustment	•	•	•	•	•	•
Maximum conductor diameter	11.8 mm	30 mm	30 mm	19 mm	19 mm	19 mm
Maximum conductor size	35 mm ²	1 × 400 mm ² or 2 × 240 mm ²	1 × 400 mm ² or 2 × 240 mm ²	120 mm ²	120 mm ²	120 mm ²
Output levels	10 mV/A, 100 mV/A	1 mV/A	1 mV/A	100 mV/A	100 mV/A	1 mV/A, 10 mV/A
Output cable	1.6 meter with BNC termination	1.2 meter with shrouded banana plugs	1.2 meter with shrouded banana plugs	1.5 meter with shrouded dual banana plugs	2 meter with BNC termination	2 meter with BNC termination and a BNC to safety shrouded banana adapter
Battery life	40 hours	60 hours	60 hours	30 hours	30 hours	30 hours
Warranty	One-year	One-year	One-year	One-year	One-year	One-year
Safety	CAT II 600 V; CAT III 300 V	CAT III 600 V	CAT III 600 V	CAT III 300 V	CAT III 300 V	CAT III 300 V

AC/DC Current Clamp Selection Guide

	80i-110s	i410	i1010	i30	i30s	i310s
114/115/116/117	0.1 A to 100 A DC/0.1 A to 70 A AC*	1.4 A to 400 A DC/6 A to 400 A AC	1.4 A to 1000 A DC/6 A to 600 A AC	30 mA to 30 A DC/60 mA to 20 A AC	30 mA to 30 A DC/60 mA to 20 A AC	0.1 A to 450 A DC/0.6 A to 300 A AC
233	0.1 A to 100 A DC/0.1 A to 70 A AC*	1.4 A to 400 A DC/6 A to 400 A AC	1.4 A to 1000 A DC/6 A to 600 A AC	30 mA to 30 A DC/60 mA to 20 A AC	30 mA to 30 A DC/60 mA to 20 A AC	0.1 A to 450 A DC/0.6 A to 300 A AC
27 II	0.1 A to 100 A DC/0.1 A to 70 A AC*	1 A to 400 A DC/1 A to 400 A AC	1 A to 1000 A DC/1 A to 600 A AC	30 mA to 30 A DC/30 mA to 20 A AC	30 mA to 30 A DC/30 mA to 20 A AC	0.1 A to 450 A DC/0.1 A to 300 A AC
28 II	0.1 A to 100 A DC/0.2 A to 70 A AC*	1 A to 400 A DC/6 A to 400 A AC	1 A to 1000 A DC/6 A to 600 A AC	30 mA to 30 A DC/60 mA to 20 A AC	30 mA to 30 A DC/60 mA to 20 A AC	0.1 A to 450 A DC/2 A to 300 A AC
77 IV	0.1 A to 100 A DC/0.1 A to 70 A AC*	1 A to 400 A DC/5 A to 400 A AC	1 A to 1000 A DC/5 A to 600 A AC	30 mA to 30 A DC/40 mA to 20 A AC	30 mA to 30 A DC/40 mA to 20 A AC	0.1 A to 450 A DC/0.4 A to 300 A AC
175/177/179	0.11 A to 100 A DC/0.3 A to 70 A AC*	1.6 A to 400 A DC/30 A to 400 A AC	1.6 A to 1000 A DC/30 A to 600 A AC	30 mA to 30 A DC/300 mA to 20 A AC	30 mA to 30 A DC/300 mA to 20 A AC	0.1 A to 450 A DC/3 A to 300 A AC
1577/1587 FC	0.1 A to 100 A DC/0.3 A to 70 A AC*	1.2 A to 400 A DC/30 A to 400 A AC	1.2 A to 1000 A DC/30 A to 600 A AC	30 mA to 30 A DC/300 mA to 20 A AC	30 mA to 30 A DC/300 mA to 20 A AC	0.1 A to 450 A DC/3 A to 300 A AC
83V/88V	0.1 A to 100 A DC/0.1 A to 70 A AC*	1 A to 400 A DC/1 A to 400 A AC	1 A to 1000 A DC/1 A to 600 A AC	30 mA to 30 A DC/30 mA to 20 A AC	30 mA to 30 A DC/30 mA to 20 A AC	0.1 A to 450 A DC/0.1 A to 300 A AC
87V	0.1 A to 100 A DC/0.2 A to 70 A AC*	1 A to 400 A DC/20 A to 400 A AC	1 A to 1000 A DC/20 A to 600 A AC	30 mA to 30 A DC/200 mA to 20 A AC	30 mA to 30 A DC/200 mA to 20 A AC	0.1 A to 450 A DC/2 A to 300 A AC
287/289	0.1 A to 100 A DC/0.1 A to 70 A AC*	1 A to 400 A DC/1 A to 400 A AC	1 A to 1000 A DC/1 A to 600 A AC	30 mA to 30 A DC/30 mA to 20 A AC	30 mA to 30 A DC/30 mA to 20 A AC	0.1 A to 450 A DC/0.1 A to 300 A AC
123/124	0.1 A to 100 A DC/0.25 A to 70 A AC	1 A to 400 A DC/25 A to 400 A AC**	1 A to 1000 A DC/25 A to 600 A AC**		30 mA to 30 A DC/250 mA to 20 A AC	0.1 A to 450 A DC/2.5 A to 300 A AC
190 Series II	0.1 A to 100 A DC/0.1 A to 70 A AC	1 A to 400 A DC/5 A to 400 A AC**	1 A to 1000 A DC/5 A to 600 A AC**	30 mA to 30 A DC/50 mA to 20 A AC**	30 mA to 30 A DC/50 mA to 20 A AC	0.1 A to 450 A DC/0.5 A to 300 A AC
8808A	0.1 A to 100 A DC/0.1 A to 70 A AC*	1 A to 400 A DC/2 A to 400 A AC	1 A to 1000 A DC/2 A to 600 A AC	30 mA to 30 A DC/30 mA to 20 A AC	30 mA to 30 A DC/30 mA to 20 A AC	0.1 A to 450 A DC/0.2 A to 300 A AC
8845A/8846A	0.1 A to 100 A DC/0.1 A to 70 A AC*	1 A to 400 A DC/1 A to 400 A AC	1 A to 1000 A DC/1 A to 600 A AC	30 mA to 30 A DC/30 mA to 20 A AC	30 mA to 30 A DC/30 mA to 20 A AC	0.1 A to 450 A DC/0.1 A to 300 A AC
705/707	0.1 A to 100 A DC, no AC*	4 A to 400 A DC, no AC	4 A to 1000 A DC, No AC	40 mA to 30 A DC, no AC	40 mA to 30 A DC, no AC	0.4 A to 450 A DC, no AC
715	0.1 A to 100 A DC, no AC*	4 A to 400 A DC, no AC	4 A to 1000 A DC, No AC	40 mA to 30 A DC, no AC	40 mA to 30 A DC, no AC	0.1 A to 450 A DC, no AC
787B/789	0.1 A to 100 A DC/0.2 A to 70 A AC*	1 A to 400 A DC/20 A to 400 A AC	1 A to 1000 A DC/20 A to 600 A AC	30 mA to 30 A DC/200 mA to 20 A AC	3 mA to 30 A DC/200 mA to 20 A AC	0.1 A to 450 A DC/2 A to 300 A AC

* Requires PM9081 Adapter

** Requires PM9082/001 Adapter

AC/DC Current Clamps



i410 AC/DC Current Clamp

This battery-powered Hall-effect probe measures 1 A to 400 A with large-claw clamp that gives access to difficult-to-reach areas. It is compatible with most multimeters and other devices that measure AC and DC current and accepts shrouded 4 mm banana plugs.

- On/Off LED indicator
- AC and DC current range: 1 A to 400 A
- Frequency range: DC to 3 kHz
- Safety rating: CAT III 600 V



i410-KIT AC/DC Current Clamp and Carry Case Kit

This special-value kit for electrical professionals adds AC and DC current measurement capabilities to a digital multimeter. A roomy carrying case holds a meter and the current clamp plus test leads, probes and manuals. Kit includes:

- i410 AC/DC Current Clamp
- C116 Soft Carrying Case



i1010 AC/DC Current Clamp

This clamp measures both AC and DC currents with a large-jaw, battery-powered Hall-effect probe that gives access to difficult-to-reach areas. It is compatible with most Fluke multimeters and any other devices that measure AC and DC current and accept shrouded 4 mm banana plugs.

- On/Off LED indicator
- AC current range: 1 A to 600 A AC
- DC current range: 0.5 A to 1000 A DC
- Frequency range: DC to 10 kHz
- Safety rating: CAT III 600 V RMS



i1010-Kit AC/DC Current Clamp and Carry Case Kit

This special-value kit for electrical professional adds AC and DC current measurement capabilities to a digital multimeter. A roomy carrying case holds a meter and the current clamp plus test leads, probes and manuals. Kit includes:

- i1010 AC/DC Current Clamp
- C116 Soft Carrying Case



i30 AC/DC Current Clamp

Based on Hall-effect technology, this battery-powered clamp measures both AC and DC current. It may be used in conjunction with multimeters, recorders and other suitable recording instruments for accurate non-intrusive current measurement.

- AC current range: 30 mA to 20 A RMS
- DC current range: 30 mA to 30 A
- Frequency range: DC to 20 kHz (-0.5 dB)
- Safety rating: CAT III 300 V



i30s AC/DC Current Clamp

Based on Hall effect technology, this battery-powered clamp measures both AC and DC current. It may be used with ScopeMeter® and other suitable recording instruments for accurate non-intrusive current measurement.

- AC current range: 30 mA to 20 A RMS
- DC current range: 30 mA to 30 A
- Frequency range: DC to 100 kHz
- Safety rating: CAT III 300 V



i310s AC/DC Current Clamp

Based on Hall-effect technology, this battery-powered clamp measures both AC and DC current. This clamp is especially useful for current measurements on inverters, switching power supplies, industrial controllers, automotive diagnostics, and other applications requiring current measurements and/or waveform analysis.

- AC current range: 0.1 A to 300 A
- DC current range: 0.1 A to 300 A
- Frequency range: DC to 20 kHz
- Safety rating: CAT III 300 V



80i-110s AC/DC Current Clamp

This clamp is compatible with ScopeMeters®, power harmonics analyzers, multimeters, and other voltage measurement devices that have BNC input connectors.

- AC current range: 0.1 A to 70 A
- DC current range: 0.1 A to 100 A
- Frequency range: DC to 100 kHz
- Optional PM9081/001 Dual Banana Plug Male to Female BNC Adapter is available for digital multimeters
- Safety rating: CAT II 600 V

Did you know?

Does your current probe read zero current when you clamp it around a power cord?

That's because the power cord has both the hot and neutral current carrying wire in it. If both wires are in the jaws of the clamp meter, the fields cancel each other out, and the current clamp will read nothing. You need to put just one current-carrying conductor in the jaw of the current clamp. If you don't have access to the separate wires within the cord, use a line splitter tool to avoid breaking the circuit.