

Fluke current clamps extend the current ranges of digital multimeters, power quality analyzers, and oscilloscopes and are available for both ac and ac/dc environments. Most clamps are made with a soft, non-slippery overmold handle to prevent accidental touching of live wires. For more information on using clamps, visit www.fluke.com/clamp-howto.

i400

Current clamps: AC

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AC current clamp specifications

	i5s	i200	i200s	i400	i400s	i800	i1000s	i3000s
AC range	10 mA to 6 A	1 A to 200 A	1 A to 200 A	1 A to 400 A	0.5 A to 400 A	0.1 A to 600 A	0.2 A to 1000 A	1 A to 3000 A
Accuracy	10 mA to 1 A 1% + 5 mA 1 A to 5 A 1%, 48 Hz to 65 Hz	≤ 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	.5 A to 40 A, 2% + .015 A, 5 A to 400 A, 2% + .04 A, 45 Hz to 400 Hz	± 2% of rdg., 50 Hz to 1 kHz ± 3% of rdg., (typical) 30 Hz to 50 Hz and 1 kHz to 10 kHz	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 A to 30 A: 2% + 0.1 A 1 A to 300 A: 2% + 0.5 A 1 A to 3000 A: 2% + 2 A 48 Hz to 65 Hz
Bandwidth (-3 dB)	40 Hz to 5 kHz	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	5 Hz to 100 kHz	10 Hz to 100 kHz
Maximum conductor dia.	15 mm (0.59 in)	20 mm (0.8 in)	20 mm (0.8 in)	32 mm (1.25 in)	32 mm (1.25 in)	54 mm (2.13 in)	54 mm (2.13 in)	64 x 100 mm (2.52 in x 3.94 in)
Maximum conductor size	2 AWG	300 MCM	300 MCM	750 MCM	750 MCM	2-500 MCM or 1-1000 MCM	2-500 MCM or 1-1000 MCM	64 mm (2.52 in)
Output levels	400 mV/A	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
Output cable	2.5 m to BNC termination	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
Warranty	One-year	One-year	One-year	One-year	One-year	One-year	One-year	One-year
Safety rating	NA	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

	i430-flex	i2000 flex	i3000s flex-24/i3000s flex-36	i6000s flex-24/i6000s flex-36
AC range	30 A to 3000 A	2 A to 2000 A	3 A to 3000 A	6 A to 6000 A
Accuracy	± 1% of reading at 25 °C, 50 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, Ranges: 60 A, 600 A, 6000 A
Bandwidth (-3 dB)	10 Hz to 7 kHz	10 Hz to 20 kHz	10 Hz to 50 kHz	10 Hz to 50 kHz
Maximum conductor dia.	177 mm (7 in)	177 mm (7 in)	177 mm (7 in) or 265 mm (10.4 in)	177 mm (7 in) or 265 mm (10.4 in)
Maximum conductor size	610 mm (24 in) circumference	610 mm (24 in) circumference	610 mm (24 in) circumference	610 mm (24 in) circumference
Output levels	85 mV at 1000 A rms, 50 Hz	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	2.5 m to BNC termination	2 m with double shrouded banana plugs	2.1 m to BNC termination	2 m to BNC termination
Battery life	No battery	NA	400 hours	400 hours
Warranty	One-year	One-year	One-year	One-year
Safety rating	CAT II 1000 V, CAT III 600 V, CAT IV 300 V	CAT III 600 V	CAT III 600 V	CAT III 600 V

Left to right: i800, i400, i200s

AC clamp-on current probe compatibility

Model number	i5s	i200	i200s	i400	i400s	i800	i1000s	i3000s	i430-flex	i2000 FLEX ¹	i3000s FLEX	i6000s FLEX ²
10/11/12/12B/16/18			1 A to 200 A		1 A to 400 A*		0.2 A to 1000 A*	1 A to 3000 A		2 A to 2000 A	3 A to 3000 A	6 A to 6000 A
110/111/112			3 A to 200 A		30 A to 400 A*		3 A to 1000 A*	30 A to 3000 A		3 A to 2000 A	3 A to 3000 A	6 A to 6000 A
114/116			1 A to 200 A		0.6 A to 400 A*		0.2 A to 1000 A*	1 A to 3000 A		2 A to 2000 A	3 A to 3000 A	6 A to 6000 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	0.2 A to 1000 A*	1 A to 3000 A		2 A to 2000 A	3 A to 3000 A	6 A to 6000 A
21/23/73/75/77 Series III		1 A to 200 A	1 A to 200 A	1 A to 400 A	1 A to 400 A*	0.1 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	6 A to 6000 A
26/79 Series III		1 A to 40 A	1 A to 200 A	1 A to 40 A/ 200 A to 400 A	2 A to 400 A*	0.4 A to 40 A, 200 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	6 A to 6000 A
27		1 A to 200 A	1 A to 200 A	1 A to 400 A	1 A to 400 A*	0.1 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	6 A to 6000 A
70 Series III			1 A to 200 A		1 A to 400 A*		0.2 A to 1000 A*	1 A to 3000 A		2 A to 2000 A	3 A to 3000 A	6 A to 6000 A
77-IV						0.1 A to 800 A						6 A to 6000 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	6 A to 6000 A
1577/1587		3 A to 200 A	1 A to 200 A	3 A to 400 A	3 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	6 A to 6000 A
83III/83V/88V		2 A to 200 A	1 A to 200 A	2 A to 400 A	1 A to 400 A*	0.25 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	6 A to 6000 A
85/87 Series III 87 Series V		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	6 A to 6000 A
87/89 Series IV 187/189		2.5 A to 200 A	1 A to 200 A	2.5 A to 400 A	0.5 A to 400 A*	2.5 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	6 A to 6000 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	
8060A/8062A		2 A to 200 A	1 A to 200 A	2 A to 400A	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	6 A to 6000 A
860 Series		1 A to 200 A	1 A to 200 A	1 A to 400 A	3 A to 400 A*	1.5 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	6 A to 6000 A
39/41B			1 A to 200 A ²		1 A to 400 A ²		0.2 A to 1000 A ²	1 A to 3000 A ²		2 A to 2000 A ²	3 A to 3000 A ²	6 A to 6000 A
43B			1 A to 200 A		0.5 A to 400 A		0.2 A to 1000 A	1 A to 3000 A		2 A to 2000 A	3 A to 3000 A	6 A to 6000 A
434/435	10 mA to 6 A		1 A to 200 A		1.2 A to 400 A		0.3 A to 1000 A	1.2 A to 3000 A	30 A to 3000 A	Best to use i430Flex	Best to use i430Flex	
9X Series			1 A to 200 A		1 A to 400 A		0.2 A to 1000 A	1 A to 3000 A		2 A to 2000 A	3 A to 3000 A	6 A to 6000 A
120 Series			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	6 A to 6000 A
190 Series			1 A to 200 A		1 A to 400 A		0.2 A to 1000 A	1 A to 3000 A		2 A to 2000 A	3 A to 3000 A	6 A to 6000 A
45 DMM		1.5 A to 100 A	1 A to 200 A	1.5 A to 100 A	1.5 A to 400 A*	1.5 A to 100 A, 500 A to 800 A	0.15 A to 1000 A*	1.5 A to 3000 A		2 A to 2000 A	3 A to 3000 A	6 A to 6000 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	0.2 A to 1000 A*	1 A to 3000 A		2 A to 2000 A	3 A to 3000 A	6 A to 6000 A
8845A/8846A		1 A to 200 A	1 A to 200 A	1 A to 400 A	1 A to 400 A*	0.5 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	6 A to 6000 A
74X Series			1.1 A to 200 A		11 A to 400 A*		1.1 A to 1000 A*	11 A to 3000 A		2 A to 2000 A	3 A to 3000 A	6 A to 6000 A
787/789		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	6 A to 6000 A

*Requires PM9081/001 Adapters. ¹Three range version. ²Current and watt readings will be multiples of 10 higher or lower than actual on some ranges. ³Current readings will read half of the expected cardinal value on all meters.

AC-only clamps

Fuke current clamps provide accurate current measurements without breaking electric circuits.

NEW! 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 (0.16 in) 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 rms

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. It is compatible with most digital multimeters or any other current measurement device that accepts 4 mm (0.16 in) shrouded banana plugs and has an ac milliamp range. 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 4 mm (0.16 in) banana plugs. It is compatible with most digital multimeters or other current measurement device that accepts shrouded 4 mm (0.16 in) banana plugs and has 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. It is an ideal companion to a ScopeMeter, power quality meter, or digital multimeter.

- Current ranges: 20 A and 200 A ac switchable
- Frequency range: 40 Hz to 40 kHz
- Safety rating: CAT III 600 V

i2000 Flex AC Current Clamp

This current probe utilizes the Rogowski (air-cored coil) principle. It 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: 0.2 A to 1000 A ac
- Frequency range: 5 Hz to 100 kHz
- Accurate displays due to a passive filter that eliminates noise and ring on rapidly-rising di/dt waveforms
- Optional PM9081/001 Dual Banana Plug (male) to Female BNC Adapter is available for digital multimeters
- Safety rating: CAT III 600 V



i400



i400s



i200



i800



i200s

i430 Flex Current Clamp

This flex clamp uses the Rogowski (air-cored coil) principle and is perfect for use with Fluke 430 Series Three-Phase Power Quality Analyzers. 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 bus bars and large conductors. This clamp is powered by the 430 series Analyzer; no batteries required.

- Current range: 30 A to 3000 A ac
- Frequency range: 10 Hz to 7 kHz (-3 dB)
- Safety rating: CAT IV 300 V, CAT III 600 V, CAT II 1000 V

Also available in a convenient four-pack (i430 Flex 4 Pack)

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 4 mm (0.16 in) banana input plugs. This clamp is optimized for measurement on power distribution systems.

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



i1000s



i2000

i3000s Flex-24 or -36 AC Current Clamp

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 (24 in and 36 in) lengths.

- Current range: 30 A, 300 A, and 3000 A switchable
- Frequency range: 10 Hz to 100 kHz
- Safety rating: CAT III 600 V

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

i5s AC Current Clamp

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

- Current range: 10 mA to 6 A
- Frequency range: 40 Hz to 5 kHz
- Safety rating: CAT III 600 V (for insulated conductors only)

Also available in a convenient three-pack (i5sPQ3)

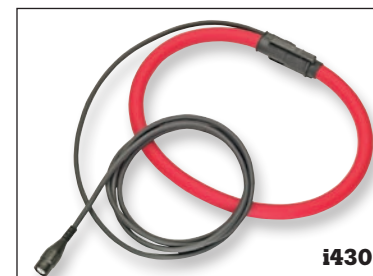


i6000s

i6000s Flex-24 or -36 AC Current Clamp

This ac current clamp utilizes the Rogowski (air-cored coil) principle and measures three ranges of currents up to 6000 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 both 610 mm and 914 mm (24 in and 36 in) 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



i430



i3000s



i5s



i3000s Flex-24