

Voltech CL1000 Current Transformer

Clamp-on Transformer for 1000A : 1A AC Current Measurements



The Voltech CL1000 is a clamp-on current transformer that extends the AC current capability of Voltech power analyzers such as the PM100, PM300 or PM3000A to 1000A rms.

Its close-tolerance turns ratio and carefully controlled magnetic circuit allow the CL1000 transformer to achieve a measurement accuracy of better than 1%, and its robust construction provides a high level of isolation and protection against electrical shock.

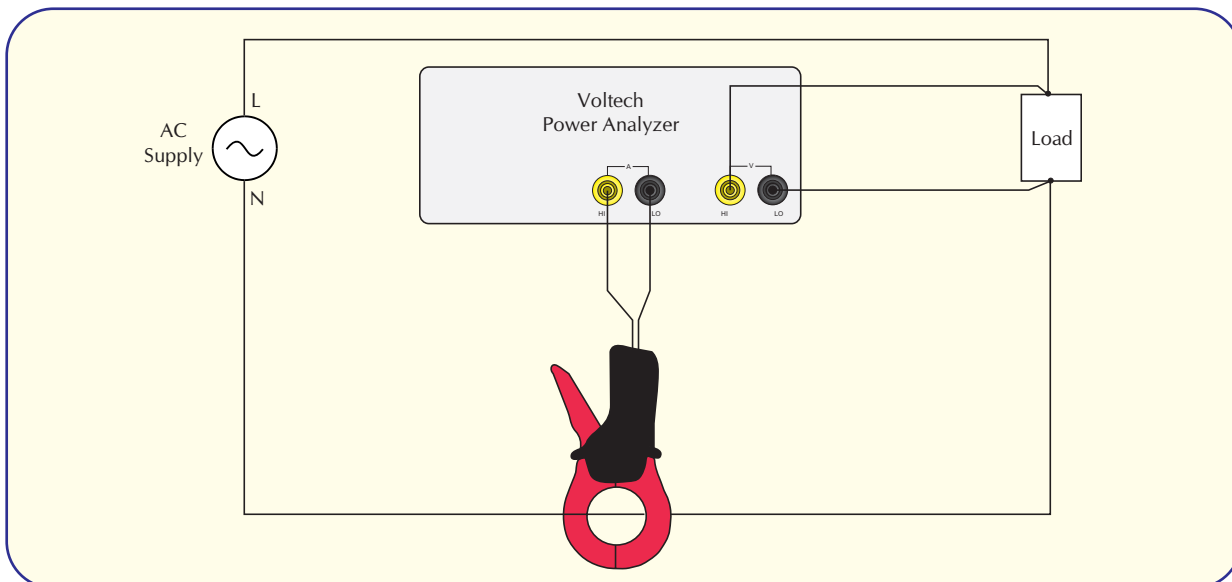
The CL1000 is supplied with a 1.5-meter lead that allows it to be connected directly to any Voltech power analyzer.

Specification

Current Range:	0.1A to 1200A (1000A continuous)	
Frequency Range:	30Hz to 5kHz (50kHz for harmonics < 10A)	
Accuracy:	1000A $\leq \pm 0.50\%$	Phase $\leq 0.50^\circ$
(23°C \pm 3°C, 48Hz to 65Hz)	200A $\leq \pm 0.75\%$	Phase $\leq 0.75^\circ$
	50A $\leq \pm 1.50\%$	Phase $\leq 1.50^\circ$
Operating Voltage:	600V to earth (non-insulated conductors)	
Safety:	To IEC1010	
Operating Temperature:	-10°C to +50°C	
Weight:	650g	

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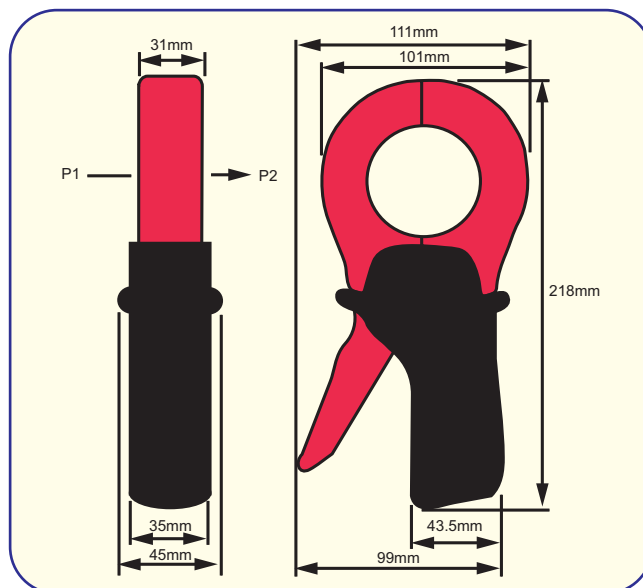
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Operation

- Connect the CL1000 to your power analyzer as shown in the diagram above.
- To measure currents between 50A and 1000A, clamp the CL1000 over the current carrying conductor.

When the CL1000 is used with a Voltech power analyzer, the analyzer's scaling function can be programmed to automatically scale the measurements by a factor of 1000. When used with power analyzers that do not have a scaling facility, measurements such as Arms, Ainst, W and VA should be multiplied by 1000.



Notes:

The CL1000 can be used to measure currents of less than 50A rms by winding the current carrying conductor several times around the CL1000's core. In this case, measurement readings of the power analyzer should be multiplied by $N/1000$, where N is the number of times the current carrying conductor passes through the center of the CL1000's core.

To maintain the CL1000's accuracy specification, it is important that the magnetic gap between the jaws is kept clean.

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