Agilent 34330A Current Shunt

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Safety Notices

Do not attempt to repair this sealed device. Do not use this device for any purpose other than indicated in these instructions. Doing so may expose you to bodily injury or cause equipment damage.

Do not install substitute parts or perform any unauthorized modification to the product. Return the product to an Agilent Technologies Sales and Service Office for service and repair to ensure that safety features are maintained.

WARNING

A WARNING notice denotes a hazard. It calls attention to an operating procedure, practice, or the like that, if not correctly performed or adhered to, could result in personal injury or death. Do not proceed beyond a WARNING notice until the indicated conditions are fully understood and met.

CAUTION

A CAUTION notice denotes a hazard. It calls attention to an operating procedure, practice, or the like that, if not correctly performed or adhered to, could result in damage to the product or loss of important data. Do not proceed beyond a CAUTION notice until the indicated conditions are fully understood and met.

Symbols

Refer to the operating instructions for important safety information.

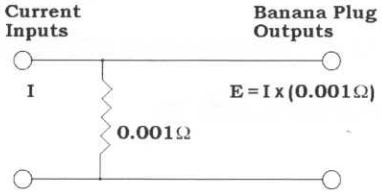
Instructions for Use

The Agilent 34330A Current Shunt is a precision 0.001Ω resistor housed in a plastic case surrounded by epoxy. Output is 1 mV per A of current passing through the shunt.

WARNING

Install the shunt in the multimeter voltage input terminals before use. Do not remove the shunt with a current source still connected, as there may be danger of shorting the banana plugs to ground. Observe the current and voltage limits listed under "Specifications."

The following simplified diagram shows how the shunt is used:



Insert the shunt's banana-plug outputs into the main voltage inputs on the multimeter (not the high ampere inputs). Then connect the current source to be measured to the shunt's input terminals (binding posts). *The multimeter will read the IR drop caused by the input current through the shunt.*

The precision resistance of the shunt is 0.001Ω, so the voltage measured by the multimeter is equal to the current multiplied by 0.001Ω. Thus, the voltage reading sensitivity is 1 mV/A. For a 15 A current, the voltage reading is 15 mV. Select an appropriate voltage range on the multimeter. See your multimeter *User's Guide* for further information.

Cleaning Instructions

Wipe with a soft cloth, moistened slightly with water, if needed.

34330-90001

Specifications

Operating Environment:	Indoor use only
Operating Temperature:	5 to 40 °C
Operating Humidity:	0 to 80% RH
Storage Temperature:	-30 to 70 °C
Input Current:	15 A (continuous) 30 A (15 minutes, max)
Input Voltage:	60 Vdc, max. 30 Vac (rms), max
Voltage Sensitivity:	1 mV/A
Accuracy (DC - 1 kHz):	±0.3%
Accuracy (1 kHz - 5 kHz):	±5%

Assistance

Product maintenance agreements and other customer assistance agreements are available for Agilent Technologies products. For assistance, contact your nearest Agilent Technologies Sales and Service Office. Further information is available on the Agilent web site at *www.agilent.com/find/assist.*

Certification

Agilent Technologies certifies that this product met its published specifications at the time of shipment from the factory. The shunt is not subject to periodic calibration.

Warranty

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