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Data Sheet

August 13, 2026

RIGOL

Rigol PCA1030 Current Probe, 50 MHz, 30 A, For Use With 7000 & 8000 Scopes, PCA Series

Rigol PCA1030 Current Probe DC to 50 MHz 30 Arms The PCA1030 isaDC to 50 MHz (minus 3 dB) current probe for insulated conductors. Rise time is less than or equal to 7 ns. Continuous rating is 30 Arms with 50 A peak non-continuous. Gain is 0.1 V/A into waveform instrument (output impedance 25 ohm class; connect to 1 MOhm class input). Amplitude accuracy is plus/minus 1.0 percent rdg plus 1 mV at or below 30 Arms and plus/minus 2.0 percent rdg at or below 50 A peak (DC and 45 to 66 Hz after 30 minutes at 23 plus/minus 5 C). Companion models are PCA2030 (100 MHz) and PCA1150 (10 MHz, 150 A). The PCA1030 isaDC to 50 MHz (minus 3 dB) current probe for insulated conductors. Rise time is less than or equal to 7 ns. Continuous rating is 30 Arms with 50 A peak non-continuous. Gain is 0.1 V/A into waveform instrument (output impedance 25 ohm class; connect to 1 MOhm class input). Amplitude accuracy is plus/minus 1.0 percent rdg plus 1 mV at or below 30 Arms and plus/minus 2.0 percent rdg at or below 50 A peak (DC and 45 to 66 Hz after 30 minutes at 23 plus/minus 5 C). Companion models are PCA2030 (100 MHz) and PCA1150 (10 MHz, 150 A). Low current and fast edge current on insulated wires



MODEL

Rigol PCA1030

CALIBRATION

Available on request

CONDITION

Used

STATUS

In stock

RFQ / SKU

PCA1030

LISTING

<https://aumictechlabs.com/products/pca1030-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Rigol PCA1030 is a current probe engineered for precision AC and DC current measurement with Rigol 7000 and 8000 series oscilloscopes. Operating from DC to 50 MHz with a rise time of ≤ 7 ns, it accommodates continuous currents up to 30 A (Arms) and peak currents of 50 A. The probe uses a thin-film Hall effect element for accurate current detection and connects directly to the oscilloscope via BNC interface with power supplied from the scope itself.

Technical Specifications
Bandwidth: DC to 50 MHz (-3 dB) Maximum Continuous Input Current: 30 A (Arms) Maximum Peak Current: 50 A Minimum AC Reading: 20 mA Maximum DC Reading: 30 A Rise Time: ≤ 7 ns Cable Length: 1.5 m Maximum Wire Size: 5 mm Probe Dimensions: $175 \times 40 \times 18$ mm Weight: 230 g Output Connector: BNC Power Source: Supplied via BNC interface from oscilloscope

Key Features
Thin-film Hall effect element for highly accurate current detection
Compact probe head suitable for low current measurement applications
Easy protection function at excessive input
Direct oscilloscope integration with no external power supply required
Supports both AC and DC current measurements in a single instrument

Typical Applications
Power supply analysis, device characterization, switching circuit evaluation, and real-time current monitoring in development and troubleshooting environments where bandwidth up to 50 MHz is required.

Compatibility & Integration
Designed for direct connection to Rigol 7000 and 8000 series oscilloscopes. Requires at least 30 minutes warm-up time after power-on to minimize zero drift. Probe includes case and user guide.

PCA1030 Characteristics / Specifications

PARAMETER	VALUE
Model	PCA1030
Manufacturer	Rigol
Instrument Type	Current probe
Alias	PCA 1030; RIGOL PCA1030
Bandwidth	DC to 50 MHz (minus 3 dB)
Rise Time	less than or equal to 7 ns
Maximum Continuous Input	30 Arms
Maximum Peak Current	50 A peak, non-continuous
Gain	0.1 V/A
Amplitude Accuracy to 30 Arms	plus/minus 1.0 percent rdg plus 1 mV
Amplitude Accuracy to 50 A Peak	plus/minus 2.0 percent rdg
Accuracy Conditions	DC and 45 to 66 Hz, within continuous max, after 30 min at 23 plus/minus 5 C
Noise	less than or equal to 2.5 mArms (20 MHz band instrument)
Temperature Coefficient Sensitivity	less than or equal to plus/minus 2 percent at 50 Hz, 30 Arms, 0 C to 40 C
Maximum Rated Power	8.5 VA
Output Impedance Class	25 ohm (must mate 1 MOhm class instrument input)
Magnetic Field Influence	less than or equal to 20 mA (DC and 60 Hz, 400 A/m)
Conductor Diameter	5 mm
Conductor Type	insulated conductor only
Cable Length	about 1.5 m
Sensor Size	about 175 mmWx 18 mmHx 40 mmD Terminator Size: about 27 mmHx 55 mmWx 18 mmD Weight: about 230 g
Operating Temperature	0 C to 40 C, less than or equal to 80 percent RH no condensation
Storage Temperature	minus 10 C to 50 C, less than or equal to 80 percent RH no condensation

PARAMETER	VALUE
Altitude	indoor, up to 2000 m, pollution degree 2
Accuracy Period	1 year (opening/closing up to 10 000 times)
Safety	EN61010
EMC	EN61326
Sibling PCA2030 Bandwidth	DC to 100 MHz, rise less than or equal to 3.5 ns
Lever Positions	OPEN, FREE, LOCK Notes Specs from Rigol PCA1030/PCA2030/PCA1150 User Guide (UGE32100). Use only on insulated conductors. Confirm 1 MOhm oscilloscope input and 30 minute warm-up before accuracy.

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
Storage temperature	minus 10 C to 50 C, less than or equal to 80 percent RH no condensation
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Full OEM specifications

Complete technical content extracted from the manufacturer datasheet. Sparse OEM tables are reconstructed as tables below; other text is preserved as paragraphs.

Specifications	
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Amplitude Accuracy to 50 A Peak	plus/minus 2.0 percent rdg
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Noise	less than or equal to 2.5 mArms (20 MHz band instrument)
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Lever Positions	OPEN, FREE, LOCK

Notes

Specs from Rigol PCA1030/PCA2030/PCA1150 User Guide (UGE32100). Use only on insulated conductors. Confirm 1 MOhm oscilloscope input and 30 minute warm-up before accuracy.

Available from Aumictech

Used and refurbished unit evaluated in-house. Calibration: Available on request. Used · In stock.

Request a quote: sales@aumictech.com · +1 (484) 841-9341

Aumictech

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NIST-traceable calibration · SAM registered ·
30-day returns
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Technical content from manufacturer specifications. Unit photo/stock from Aumictech listing when available. Specifications subject to OEM documentation and unit condition.