

TEKTRONIX

TCP0030

The Tektronix TCP0030 is a high-performance, easy-to-use AC/DC current probe designed for use with and direct connection to oscilloscopes featuring the TekVPI interface. It provides a wide bandwidth of 120 MHz with selectable 5 A and 30 A measurement ranges, offering exceptional low-current measurement capability and accuracy down to 1 mA.

SPECIFICATIONS

General

Interfaces	TekVPI
Probe Type	Active AC/DC Current Probe
Host Compatibility	Tektronix oscilloscopes with TekVPI™ interface

Physical

Power Supply	Powered directly by host oscilloscope via TekVPI interface
Operating Temperature	0 °C to +50 °C °C
Weight	0.227 kg kg
Probe Head Dimensions (L×W×H)	200 mm × 16 mm × 32 mm

Electrical Performance Specs

Bandwidth (-3 dB)	DC to >120 MHz
Rise Time (10% to 90%)	≤2.92 ns
Attenuation Ratio / Gain Settings	5 A and 30 A ranges
Maximum Input Current (RMS)	30 A
Maximum Input Current (Peak Pulse)	50 A
DC Accuracy (typical)	±1%
DC Accuracy (guaranteed)	±3%
Amp-Second Product	500 A*µs (on 30 A range)
Maximum Input Voltage (Bare Wire)	150 V CAT II
Maximum Input Voltage (Insulated Wire)	300 V CAT II
Noise Floor (typical)	≤2.5 mArms
Insertion Impedance at 1 MHz	0.08 Ω
Insertion Impedance at 10 MHz	0.15 Ω
Insertion Impedance at 50 MHz	0.27 Ω
Insertion Impedance at 100 MHz	0.7 Ω
Insertion Impedance at 120 MHz	1.0 Ω

Physical and Connectivity Specifications

Output Connector / Host Interface	TekVPI
Cable Length	2.0 m
Probe Tip / Max Conductor Diameter	5.0 mm

Power and Control

De-gauss / Balance Capability	Degauss/Autozero button on probe compensation box
Status / Error Indicators	LEDs for range and probe status on compensation box

Environmental and Safety Compliance

Storage Temperature Range	-40 °C to +75 °C
Operating Humidity Range	5% to 95% RH (at up to +30 °C), 5% to 85% RH (+30 °C to +50 °C)
Maximum Operating Altitude	3,000 m
Maximum Storage Altitude	12,192 m
Safety Standard Certifications	UL61010-1, UL61010-2-032, CAN/CSA-C22.2 No. 61010-1, CAN/CSA-C22.2 No. 61010-2-032, EN61010-1, EN61010-2-032
EMC Compliance Standards	EN61326-1, Class A; EN61326-2-1

Performance

Coupling	AC, DC
Sensitivity	1 mA (on oscilloscopes supporting 1 mV/div setting)
Propagation Delay	17 ns (typical)

TECHNOLOGY

AC/DC Current Probe (Hall Effect and Transformer)

APPLICATIONS

Current measurement

Generated by SpecAtlasHub (specatlashub.com). Specifications are compiled from available sources and are subject to change — verify critical values against the manufacturer before purchase.