TEKTRONIX

A6304XL

The Tektronix A6304XL is a high-performance, extra-long (8-meter) split-core current probe designed specifically for use with the AM503B and AM5030 current probe amplifiers. Capable of measuring up to 500 A continuous current and 700 A peak current, it operates across a bandwidth of DC to 2 MHz. Its split-core design allows for easy attachment to conductors without breaking the circuit, making it an excellent tool for testing high-power inverters, motor drives, heavy-duty machinery, and automotive systems.

SPECIFICATIONS

General

Interfaces	Compatible with AM503B and AM5030 Current Probe Amplifiers

Physical

Power Supply	Powered via host AM503B or AM5030 amplifier
Operating Temperature	0 °C to +50 °C °C
Dimensions (W×H×D)	71 mm × 51 mm × 262 mm (probe head) mm
Weight	2.1 kg kg

Electrical Performance

Bandwidth	DC to 2 MHz
Rise Time	≤ 175 ns
Maximum Continuous Current	500 A
Maximum Peak Pulse Current	700 A
Bucking Current	500 A
Maximum Voltage on Bare Conductor	600 V RMS CAT I / 300 V RMS CAT II
Measurement Capability	Simultaneous DC and AC current measurement

Mechanical & Physical Specifications

Cable Length	8 m
Maximum Conductor Size	21 mm × 26 mm (0.83 in × 1.03 in)
Probe Design	Split-core mechanical design
Sensing Mechanism	Hall Effect sensor and ferrite transformer

Compatibility & Interface

Compatible Amplifiers	AM503B, AM5030
Incompatible Amplifiers	AM503, AM503A

Environmental Specifications

Non-Operating Temperature Range	-40 °C to +75 °C
Operating Altitude	Up to 2,000 m (6,560 ft)
Non-Operating Altitude	Up to 15,240 m (50,000 ft)

Performance

Max Amp-Second Product	30,000 A-µs
System DC Accuracy	±1% (with AM503B or AM5030 amplifier, 10 °C to 30 °C)
Deflection Range	20 mA/div to 100 A/div (with AM503B or AM5030 amplifier)

Environmental

Operating Humidity	90% RH (at or below +30 °C), 75% RH (+30 °C to +50 °C)

Compliance

Safety Standards	UL3111-2-032, CSA1010.2.032, EN61010-2-032
EMC Compliance	EN 55011 Class A, EN 50082-1

Connectivity

Connector Type	Proprietary 12-pin Tektronix current probe connector

TECHNOLOGY

Hall Effect and Ferrite 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.