

TEKTRONIX

P7513A

The Tektronix P7513A is a high-performance 13 GHz TriMode differential oscilloscope probe designed for use with TekConnect host oscilloscopes. Featuring TriMode technology, it allows users to perform differential, single-ended, and common-mode measurements through a single connection point, improving efficiency and signal fidelity in high-speed digital design and debugging applications.

SPECIFICATIONS

General

Interfaces	TekConnect
Warranty	1 year

Physical

Power Supply	Powered via TekConnect host interface
Operating Temperature	0 °C to 40 °C °C
Weight	0.153 kg kg

Electrical & Performance Specifications

Analog Bandwidth	13 GHz
Rise Time (10% to 90%)	< 40 ps (typical)
Rise Time (20% to 80%)	< 28 ps (typical)
Attenuation Settings	5x, 12.5x
DC Input Resistance (Differential)	100 kΩ
DC Input Resistance (Single-Ended)	50 kΩ
Input Dynamic Range (Differential, 5x setting)	0.75 V p-p (±0.375 V)
Input Dynamic Range (Differential, 12.5x setting)	1.75 V p-p (±0.875 V)
Operating Voltage Window (Common Mode Range)	+2.5 V to -1.5 V
Offset Range	+2.5 V to -1.5 V
Maximum Non-Destructive Input Voltage	±15 V (DC + peak AC)
Common Mode Rejection Ratio (CMRR) at DC	> 60 dB
Common Mode Rejection Ratio (CMRR) at 1 GHz	> 30 dB (typical)
System Noise (Referred to Input, 5x setting)	< 1.1 mV RMS
System Noise (Referred to Input, 12.5x setting)	< 2.5 mV RMS

Measurement Modes

Differential Mode	A minus B (TriMode setting)
Single-Ended Mode A	A minus Ground (TriMode setting)
Single-Ended Mode B	B minus Ground (TriMode setting)
Common Mode	Average of A and B (TriMode setting)

Connectivity & Host Interface

Oscilloscope Interface Type	TekConnect
Cable Length	1.2 m

Environmental Specifications

Non-Operating Temperature Range	-50 °C to 105 °C
Operating Humidity Range	0% to 90% RH (at or below 30 °C); 0% to 75% RH (above 30 °C to 40 °C)
Operating Altitude	3,000 m (9,843 feet)
Non-Operating Altitude	12,000 m (39,370 feet)

Compliance & Calibration

Recommended Calibration Interval	1 year
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Performance

Propagation Delay	5.6 ns ±0.1 ns
DC Attenuation Accuracy	±2.0% (probe only), ±3.0% (system)
Output Impedance	50 Ω

Features

TriMode Settings	Differential (A-B), Single-Ended A (A-GND), Single-Ended B (B-GND), Common-Mode ((A+B)/2 - GND)
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User Interface

Probe Control Button	Allows switching between TriMode settings directly from the probe body
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Compatibility

Host Oscilloscope Compatibility	TekConnect oscilloscopes (DPO70000, DSA70000, MSO70000 series or equivalent with TekConnect interface)
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TECHNOLOGY

TriMode Differential Probe

APPLICATIONS

High-Speed Serial Bus Design, Signal Integrity, and Characterization

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