

TEKTRONIX

TLS216

The Tektronix TLS216 is a 16-channel Logic Scope (Mixed Signal Oscilloscope) designed to simplify the debugging of high-speed digital hardware. It seamlessly integrates the high-speed analog acquisition system of a 500 MHz, 2 GS/s digital storage oscilloscope with the advanced triggering and timing analysis of a logic analyzer.

SPECIFICATIONS

General

Display	High resolution color display
Warranty	3-Year Warranty

Physical

Power Supply	90 to 250 V RMS, 45 to 440 Hz, < 300 W
Operating Temperature	0 to +50 °C °C
Dimensions (W×H×D)	422 mm × 193 mm × 472 mm mm
Weight	11 kg kg

Analog Vertical System

Analog Input Channels	16
Analog Bandwidth (-3 dB)	500 MHz
Included Probe Model	P6240 active FET probe (16 included)
Probe-Tip Mass	1.5 g
Probe Input Capacitance	< 2.0 pF
Probe Input Resistance	1 MΩ

Horizontal System

Maximum Real-time Sample Rate	2 GS/s (simultaneous on all channels)
Timing Resolution	500 ps
Time Base Range	500 ps/div to 10 s/div
Time Base Accuracy	±0.015%
Maximum Record Length	2,000 points (standard), 8,000 points (with Option 1D)

Trigger System

Trigger Modes	Edge, Pulse, Glitch, Pattern, Sequence (Time-Interval), Time-out
Word Recognizers	One (16-bit pattern)
Logic Family Presets	TTL, ECL, CMOS
External Trigger Input	Yes (can be used as Trigger Arm)
Setup and Hold Triggering Range	Setup time: -100 ns to +100 ns, Hold time: -100 ns to +100 ns
Trigger Level Range	±12 divisions from center of screen
Glitch Trigger Width Range	1 ns to 20 ns

Display & User Interface

Display Modes	Analog, Timing Diagram, BusForm™
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Storage

Built-in Floppy Drive	3.5-inch MS-DOS compatible floppy disk drive
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Vertical System

Vertical Resolution	8 bits
Input Impedance	500 Ω
Input Coupling	DC
Maximum Input Voltage (1 M Ω)	5 V RMS
Vertical Sensitivity Range	2 mV/div to 1 V/div
DC Gain Accuracy	±1.5%
Vertical Position Range	±5 divisions
Offset Range	±1 V (2 mV to 99.5 mV/div), ±10 V (100 mV to 1 V/div)

Acquisition System

Record Length	2000 points
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Environmental

Non-Operating Temperature	-40 to +75 °C
Operating Altitude	Up to 4,500 m

Measurements & Analysis

Automatic Measurements	25 standard measurements
Waveform Math Functions	Add, subtract, multiply, differentiate, integrate, FFT (with Option 2F)

Interfaces & Outputs

External Video Output	VGA, D-sub 15-pin connector
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Power Requirements

Maximum Power Consumption	300 W
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TECHNOLOGY

Mixed Signal Oscilloscope

APPLICATIONS

Digital Hardware Debugging

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