

TEKTRONIX

TDS350

The Tektronix TDS350 is a portable, two-channel digital storage oscilloscope featuring a 200 MHz bandwidth and a maximum real-time sample rate of 1 GS/s on both channels simultaneously. Designed for benchtop troubleshooting and precision measurements, it features an 8-bit vertical resolution, a record length of 1,000 points per channel, and a 7-inch monochrome CRT display. With Option 14, the TDS350 can be expanded to include GPIB, RS-232, Centronics parallel, and VGA video interfaces.

SPECIFICATIONS

General

Interfaces	GPIB, RS-232, Centronics parallel, VGA output (all available via Option 14)
Display	7-inch monochrome CRT (amber phosphor)
Probe Compensator Output	5 V into $\geq 1 \text{ M}\Omega$, 1 kHz
Standard Probes Supplied	Two P6114B 10X Passive Probes
Cooling System	Forced-air fan cooling
Warm-Up Time	20 minutes

Physical

Power Supply	90 to 250 V AC, 45 to 440 Hz, 65 W maximum
Operating Temperature	0 to +50 °C °C
Dimensions (W×H×D)	362 mm × 165 mm × 489 mm mm

Vertical System

Number of Channels	2
Analog Bandwidth (-3 dB)	200 MHz
Calculated Rise Time	< 1.75 ns
Vertical Resolution	8 bits
Input Sensitivity Range	2 mV/div to 10 V/div
Input Coupling	AC, DC, GND
Input Impedance	1 M Ω in parallel with 20 pF
DC Vertical Gain Accuracy	$\pm 2\%$
Maximum Input Voltage	400 V (DC + peak AC)
Channel-to-Channel Isolation	$\geq 100:1$ at 100 MHz
Vertical Position Range	± 5 divisions
Vertical Offset Range	$\pm 1 \text{ V}$ (2 mV/div to 99.5 mV/div), $\pm 10 \text{ V}$ (100 mV/div to 995 mV/div), $\pm 100 \text{ V}$ (1 V/div to 10 V/div)

Horizontal System

Time Base Range	1 ns/div to 5 s/div
Time Base Accuracy	±100 ppm (±0.01%)

Acquisition System

Max Real-Time Sample Rate	1 GS/s
Standard Record Length	1,000 points per channel
Acquisition Modes	Sample, Envelope, Average

Trigger System

Trigger Sources	Channel 1, Channel 2, Line
Trigger Modes	Auto, Normal, Single Sweep
Trigger Types	Edge, Video
Video Trigger Formats	NTSC, PAL, SECAM
Trigger Coupling	AC, DC, Noise Reject, HF Reject, LF Reject

Waveform Measurements and Math

Automatic Measurements	21 measurements (including Period, Frequency, Rise/Fall Time, Pulse Width, Peak-to-Peak, Amplitude, RMS)
Waveform Math Operations	Addition (+), Subtraction (-)
Cursors Types	Voltage, Time

Display System

Display Type	7-inch monochrome CRT (amber)
Graticule Options	8 × 10 divisions

Interfaces and Connectivity

Optional Interfaces (Option 14)	GPIB (IEEE-488.2), RS-232, Centronics Parallel, VGA Video Output
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Power Specifications

Line Voltage Input Range	90 to 250 V AC
Line Frequency Range	45 to 440 Hz
Power Consumption (Maximum)	65 W

Environmental and Safety

Operating Temperature Range	0 °C to +50 °C
Non-Operating Temperature Range	-51 °C to +71 °C
Operating Humidity Range	Up to 95% RH at or below +30 °C
Operating Altitude	Up to 4,500 m (15,000 ft)
Non-Operating Altitude	Up to 15,000 m (50,000 ft)

Physical Specifications

Width	362 mm
Height	165 mm
Depth	489 mm

Triggering

Internal Trigger Sensitivity	0.35 div from DC to 50 MHz, 1.0 div at 200 MHz
Trigger Holdoff Range	500 ns to 10 s

Compliance

Safety Certifications	UL3111-1, CSA C22.2 No. 1010.1, EN61010-1
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Acquisition

Waveform Interpolation	Sin(x)/x
Pre-Trigger Position Range	0% to 100% of record length

Storage

Waveform Storage Capacity	2 reference waveforms
Setup Storage Capacity	10 front-panel setups

Display

Display Size	7 in (178 mm) diagonal
Display Technology	Raster-scan magnetic deflection CRT
Display Phosphor	P31 (Green)

Usability

Autosetup Feature	One-button automatic configuration of vertical, horizontal, and trigger systems
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Interfaces

GPIO Interface Capability	IEEE-488.2 standard interface (available via Option 14)
RS-232-C Serial Interface	9-pin D-sub male connector (available via Option 14)
Centronics Printer Port	Parallel printer interface (available via Option 14)
VGA Monitor Output	15-pin D-sub female connector (available via Option 14)

TECHNOLOGY

Digital Storage

APPLICATIONS

Electronic testing and troubleshooting

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