

TEKTRONIX

TDS3034B

The Tektronix TDS3034B is a 4-channel Digital Phosphor Oscilloscope (DPO) from the TDS3000B series, featuring a 300 MHz bandwidth, a real-time sample rate up to 2.5 GS/s, and a 9-bit vertical resolution. It combines standard digital oscilloscope functionality with DPO capabilities to capture, store, and analyze complex signal behaviors in real-time.

SPECIFICATIONS

General

Interfaces	LAN (10Base-T Ethernet RJ-45, standard); GPIB, RS-232, VGA video output (via optional TDS3GV module)
Display	6.4 in (162.6 mm) Color Active-Matrix TFT LCD, 640 × 480 VGA resolution

Physical

Power Supply	100 to 240 V AC ±10%, 47 to 440 Hz (at 100 to 120 V), 47 to 63 Hz (at 115 to 240 V), 75 W maximum
Operating Temperature	0 °C to +50 °C °C
Dimensions (W×H×D)	375 mm × 176 mm × 149 mm mm
Weight	3.2 kg kg

Key Performance Specifications

Bandwidth	300 MHz
Calculated Rise Time	1.2 ns
Number of Channels	4
Maximum Real-time Sample Rate	2.5 GS/s
Maximum Record Length	10k points per channel
Vertical Resolution	9-bit
Waveform Capture Rate	Up to 3,600 wfms/s

Vertical System

Input Coupling	AC, DC, GND
Input Impedance	1 MΩ ±1% in parallel with 13 pF ±2 pF, or 50 Ω ±1%
Input Sensitivity Range	1 mV/div to 10 V/div (1 MΩ); 1 mV/div to 1 V/div (50 Ω)
Vertical Gain Accuracy	±2%
Maximum Input Voltage	150 V RMS CAT I (1 MΩ); 5 V RMS (50 Ω)
Bandwidth Limiters	20 MHz, 150 MHz
Input Capacitance	13 pF
Intermediate Bandwidth Limit	150 MHz
Low-Frequency Bandwidth Limit	20 MHz

Horizontal System

Time Base Range	2 ns/div to 10 s/div
Time Base Accuracy	±20 ppm

Trigger System

Trigger Modes	Auto, Normal, Single Sequence
Trigger Coupling	DC, HF Reject, LF Reject, Noise Reject, AC
Trigger Source	CH1, CH2, CH3, CH4, Line
Trigger Level Range	±8 divisions from center of screen
Trigger Holdoff Range	250 ns to 8 s
Edge Triggering	Positive or negative slope on any channel; conventional level-driven trigger
Video Triggering	Triggers on all lines, individual lines, odd/even fields, or all fields on NTSC, PAL, and SECAM video systems
Runt Triggering	Trigger on a pulse that crosses one threshold but fails to cross a second threshold
Slew Rate Triggering	Trigger on pulse edge rates that are faster or slower than a specified rate
Trigger Sensitivity (Internal, DC Coupled)	0.35 div from DC to 50 MHz, increasing to 1 div at 300 MHz

Acquisition Modes

Sample Mode	Acquire sampled values only
Envelope Mode	Max/min values accumulated over one or more acquisitions
Average Mode	Waveform average selectable from 2 to 512
Single Sequence Mode	Acquires a single sequence of triggered waveforms

Waveform Measurements

Measurement Gating	Gated by full screen or cursor boundaries
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Display and UI

Display Graticule	Full, Grid, Crosshair, Frame
Waveform Display Styles	Vectors, Dots, Variable Persistence, Infinite Persistence

Connectivity & Storage

Removable Storage Media Type	3.5-inch 1.44 MB floppy disk drive
External Trigger Input	Not applicable (no external trigger input on 4-channel models)

Power System

Battery Option Operating Time	Up to 3 hours with optional TDS3BATB rechargeable battery pack
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Physical Characteristics

Weight (with Optional Battery)	4.1 kg
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Environmental & Safety

Operating Altitude	Up to 3,000 meters
Safety Certifications	UL61010B-1, CAN/CSA-C22.2 No. 1010.1, EN61010-1
Electromagnetic Compatibility	EN61326 Class A, Annex A; FCC Part 15, Subpart B, Class A

Application Modules & Accessories

Standard Probes	P6139A 10X Passive Probes (one per channel)
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Power

Power Consumption	75 W maximum
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Environmental

Cooling Clearance Requirement	50 mm (2 in) required on left side and rear
Operating Vibration	0.31 g RMS, 5 Hz to 500 Hz
Non-operating Vibration	2.46 g RMS, 5 Hz to 500 Hz
Operating Shock	50 g, half-sine, 11 ms

Storage

Internal Waveform Storage	4 reference waveforms
Internal Setup Storage	10 front-panel setups

Display

Display Resolution	640 x 480 pixels
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TECHNOLOGY

Digital Phosphor Oscilloscope (DPO)

APPLICATIONS

Electronic design, debug, manufacturing test, and educational labs

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