

TEKTRONIX

TDS754C

The Tektronix TDS754C is a 500 MHz, 4-channel digital oscilloscope from the acclaimed TDS700C series. It features a maximum sample rate of 2 GS/s and incorporates Tektronix's InstaVu acquisition technology, enabling a waveform capture rate of up to 400,000 waveforms per second to quickly identify intermittent anomalies. It delivers exceptional signal fidelity with $\pm 1\%$ DC gain accuracy and up to 13-bit vertical resolution in Hi-Res mode.

SPECIFICATIONS

General

Display	7-inch NuColor CRT
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Physical

Power Supply	90 to 250 VAC, 45 to 440 Hz; up to 300 W max power consumption
Operating Temperature	+4 to +50 °C
Dimensions (W×H×D)	343 × 193 × 411 mm
Weight	14.1 kg

Vertical System

Analog Bandwidth	500 MHz
Calculated Rise Time	700 ps
Input Channels	4
Vertical Sensitivity Range	1 mV/div to 10 V/div
Hardware Bandwidth Limits	20 MHz, 250 MHz
Input Coupling	AC, DC, GND
Input Impedance	1 M Ω $\pm 0.5\%$ 10 pF ± 2 pF, or 50 Ω $\pm 1\%$
Maximum Input Voltage (1 M Ω)	400 V (DC + peak AC)
Maximum Input Voltage (50 Ω)	5 V RMS (with peaks $\leq \pm 50$ V)
Offset Range (1 mV/div to 99.5 mV/div)	± 1 V
Offset Range (100 mV/div to 995 mV/div)	± 10 V
Offset Range (1 V/div to 10 V/div)	± 100 V
Position Range	± 5 divisions
Channel-to-Channel Isolation	>100:1 at 100 MHz, >30:1 at rated bandwidth

Horizontal System

Maximum Sample Rate	2 GS/s (1 or 2 channels), 1 GS/s (3 or 4 channels)
Time Base Range	500 ps/div to 10 s/div
Time Base Accuracy	± 25 ppm

Acquisition System

Standard Record Length	50,000 points per channel
Maximum Waveform Capture Rate	Up to 400,000 wfms/s (InstaVu mode)
Peak Detect Minimum Width	1 ns
Acquisition Modes	Sample, Envelope, Average, Peak Detect, Hi-Res, InstaVu

Triggering System

Trigger Modes	Auto, Normal, Single
Trigger Coupling	AC, DC, HF Rej, LF Rej, Noise Rej

Waveform Measurements and Math

Automatic Measurements	25 parameters
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Input/Output Interfaces

GPIB Interface	IEEE 488.2
Video Output	VGA

Triggering

Trigger Level Range (Internal)	±8 divisions from center of screen
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Data Storage

Front Panel Setup Storage	10 setups
Reference Waveform Storage	4 reference waveforms
Removable Media	1.44 MB 3.5-inch MS-DOS compatible floppy disk drive

Compliance

Safety Standards	UL 3111-1, CSA 1010.1, EN 61010-1, IEC 61010-1
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Power

Maximum Power Consumption	300 W
Line Voltage Range	90 to 250 VRMS
Line Frequency Range	45 to 66 Hz (90 to 250 V), 360 to 440 Hz (90 to 132 V)

Trigger System

Edge Trigger Sensitivity (DC to 50 MHz)	0.35 division
Edge Trigger Sensitivity (at rated bandwidth)	1.0 division

TECHNOLOGY

InstaVu Acquisition

APPLICATIONS

General Purpose Oscilloscope

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