

TEKTRONIX

TDS620A

The Tektronix TDS620A is a legacy 500 MHz, 2-channel digital digitizing oscilloscope designed for high-speed digital design and troubleshooting. Featuring a simultaneous real-time sampling rate of up to 2 GS/s on both channels, 8-bit vertical resolution, and a monochrome CRT display, it offers precision waveform analysis.

SPECIFICATIONS

General

Interfaces	GPIB (standard); RS-232, Centronics, VGA (optional with Option 13)
Display	17.78 cm (7 in) Monochrome CRT
Warm-up Time	20 minutes
Safety Certifications	UL 1244, CSA C22.2 No. 231, EN 61010-1

Physical

Power Supply	90 to 250 VAC, 45 to 440 Hz, 300 W max
Operating Temperature	0 to +50 °C °C
Dimensions (W×H×D)	445 mm × 193 mm × 473 mm mm
Weight	12.3 kg kg

Vertical System

Analog Bandwidth	500 MHz
Number of Channels	2
Simultaneous Channels	2
Vertical Resolution	8 bits
Minimum Vertical Sensitivity	1 mV/div
Maximum Vertical Sensitivity	10 V/div
Rise Time	700 ps
Input Impedance	50 Ω
Input Coupling	DC, GND
Maximum Input Voltage	5 Vrms
Selectable Bandwidth Limits	20 MHz, 250 MHz
DC Gain Accuracy	±1.5%
Position Range	±5 divisions
Vertical Gain Accuracy	±1.5% (10 mV/div to 10 V/div), ±2.5% (1 mV/div to 9.9 mV/div)
Channel-to-Channel Deskew Range	±25 ns

Horizontal System

Maximum Real-time Sample Rate	2 GS/s
Single Channel Max Sample Rate	2 GS/s
Maximum Record Length	2000 pt
Minimum Timebase	500 ps/div
Maximum Timebase	5 s/div
Timebase Accuracy	±0.01%

Trigger System

Trigger Sources	External, Internal
Trigger Modes	Auto, Edge, Normal, Pulse, Single
Trigger Holdoff Range	250 ns to 12 s

Display and User Interface

Display Type	CRT Monochrome
Display Size	17.78 cm
Waveform Display Modes	Dot, Vector
Graticule Types	Full, Grid, Crosshair, Frame

Waveform Measurements & Analysis

Automatic Measurements	25 standard measurements
Cursor Measurements	Volts, Time, Frequency
Waveform Math Operations	Addition, Subtraction, Multiplication

Connectivity & Interfaces

GPIB Interface	Standard (IEEE-488.2)
VGA Video Output	Optional (Option 13)
RS-232 Serial Port	Optional (Option 13)
Centronics Parallel Port	Optional (Option 13)

Power Specifications

Line Voltage Range	90 to 250 VAC
Line Frequency Range	45 to 440 Hz
Power Consumption	300 W max

Environmental & Safety

Operating Temperature Range	0 to +50 °C
Operating Humidity Range	Up to 95% RH (at or below +40 °C)
Operating Altitude	Up to 4,572 m (15,000 ft)

Physical Characteristics

Height	193 mm
Width	445 mm
Depth	473 mm
Net Weight	11.1 kg

Accessories & Configurations

Option 2F	Advanced DSP Math (FFT, Integration, Differentiation)
Option 13	RS-232, Centronics, and VGA ports
Option 1R	Rackmount Kit

Acquisition System

Acquisition Modes	Sample, Envelope, Average
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Triggering

Advanced Triggering Types	Edge, Pulse (Glitch, Width, Runt, Slew Rate, Setup/Hold), Logic (Pattern, State)
External Trigger Channels	2 auxiliary inputs (Aux 1 and Aux 2)

Storage

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

Options

Option 05	Video Trigger (NTSC, PAL, SECAM, and custom formats)
Option 1F	Adds 3.5-inch 1.44 MB floppy disk drive (MS-DOS compatible)

Environmental

Non-Operating Temperature Range	-22 °C to +60 °C
Non-Operating Altitude	Up to 40,000 ft (12,190 m)

Probes & Accessories

Standard Probes Included	Two P6139A 10X Passive Probes (500 MHz)
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Physical & Environmental

Cooling System	Forced-air circulation with fan
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TECHNOLOGY

Digital Storage Oscilloscope (DSO)

APPLICATIONS

Electronic Test and Measurement

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