TEKTRONIX

TDS8000

The Tektronix TDS8000 is a high-performance Digital Sampling Oscilloscope featuring a modular architecture that supports up to eight channels. Designed for high-speed telecom and datacom testing, it delivers bandwidths up to 50 GHz (module dependent) along with exceptional trigger jitter performance and horizontal timebase stability. The system runs on a Microsoft Windows-based graphical user interface with a 10.4-inch display, combining high measurement resolution and repeatability with a comprehensive suite of automatic measurements.

SPECIFICATIONS

General

Interfaces	GPIB (IEEE-488.2), LAN (Ethernet), RS-232, Parallel Port, VGA Out, PS/2 Keyboard/Mouse
Display	10.4 in. Active-matrix color LCD

Physical

Power Supply	100 to 240 V AC ±10%, 50 to 60 Hz
Operating Temperature	10 to 40 °C °C
Dimensions (W×H×D)	455 mm × 343 mm × 419 mm mm
Weight	19.1 kg (without modules) kg

Vertical System

Analog Bandwidth (-3 dB)	DC to 50 GHz (module dependent)
Number of Input Channels	Up to 8 channels (modular)
Vertical Resolution (ADC)	14 bits
Module Slots	4 small form-factor slots
Supported Modules	8000 Series (80E00 electrical and 80C00 optical modules)

Display and User Interface

Display Size	10.4 in.

Processor and Storage

Operating System	Microsoft Windows

Trigger System

Trigger Jitter	< 1.0 ps RMS (typical)
Direct Trigger Frequency Range	DC to 3 GHz
Prescaled Trigger Frequency Range	2 GHz to 10 GHz

Physical Characteristics

Form Factor	Modular Mainframe

Horizontal System

Timebase Range	2 ps/div to 5 ms/div
Record Length	20 to 4000 points
Horizontal Resolution	10 fs

Environmental

Storage Temperature Range	-22 °C to +60 °C
Operating Humidity Range	20% to 80% RH (non-condensing)
Operating Altitude	3,000 m
Non-Operating Altitude	12,190 m

Acquisition System

Maximum Acquisition Rate	200 kS/s
Acquisition Modes	Sample, Average, Envelope

Math & Measurements

Mathematical Waveform Functions	Add, Subtract, Multiply, Divide, Differentiate, Integrate, FFT, Algebraic Expressions

Storage

Storage Media	Internal Hard Disk Drive, 3.5 in 1.44 MB Floppy Drive, CD-ROM Drive

TECHNOLOGY

Digital Sampling

APPLICATIONS

High-speed optical and electrical signal analysis, telecom/datacom testing, and jitter analysis