TEKTRONIX

11801B

The Tektronix 11801B is a high-performance Digital Sampling Oscilloscope designed for demanding high-bandwidth applications, including high-speed electrical signal analysis, communication system testing, and semiconductor characterization. Offering a bandwidth capability up to 50 GHz, an extremely fast 7 ps rise time, and a modular architecture supporting up to 8 channels, the 11801B provides comprehensive automatic measurements, statistical analysis, and jitter profiling.

SPECIFICATIONS

General

Interfaces	GPIB (IEEE-488), RS-232-C
Display	Color CRT
Internal Calibrator Output Voltage	250 mV (into 50 Ω)
Internal Calibrator Frequency	100 kHz

Physical

Power Supply	90 to 132 VAC / 180 to 250 VAC, 48 to 440 Hz
Operating Temperature	0 to +50 °C °C
Dimensions (W×H×D)	448 mm × 241 mm × 599 mm mm
Weight	22.3 kg

Vertical System

Analog Bandwidth (-3 dB)	DC to 50 GHz (sampling head dependent)
Calculated Rise Time (10% to 90%)	7 ps (sampling head dependent)
Number of Input Channels	Up to 8 channels
Vertical Resolution (ADC)	8 bits
Sampling Head Slots	4 dual-channel mainframe slots
Vertical Accuracy	±0.4% of full scale (mainframe only)
Maximum Channel Capacity	Up to 136 channels (using SM-11 Multi-Channel Units)
Compatible Sampling Heads	Tektronix SD Series (including SD-14, SD-20, SD-22, SD-24, SD-26, SD-32, SD-44)

Horizontal System

Maximum Real-Time Sampling Rate	200 kS/s (0.2 MSa/s)
Maximum Record Length	5120 points
Minimum Time Base Range	1 ps/div
Maximum Time Base Range	5 ms/div (0.005 s/div)
Time Base Resolution	10 fs

Trigger System

Trigger Sources	Internal, External
Direct Trigger Frequency Range	DC to 3.0 GHz
Prescaled Trigger Frequency Range	2.0 GHz to 10 GHz (with Option 1T)
Trigger Jitter	< 2.0 ps RMS (mainframe)

Waveform Measurements and Analysis

Automatic Measurements	Jitter, Noise, Statistical, Histograms, Mask Testing, and Pulse with statistics

Physical Characteristics

Form Factor	Benchtop / Rackmountable

Signal Processing

Waveform Math	Addition, subtraction, multiplication, division

Triggering

Trigger Input Connector	SMA (female)
Trigger Input Impedance	50 Ω

Measurement Functions

Waveform Histograms	Vertical and horizontal with statistical analysis (mean, standard deviation, peak-to-peak, hits)

Display

CRT Display Technology	9-inch color magnetic deflection CRT

TECHNOLOGY

Digital Sampling Oscilloscope

APPLICATIONS

High-speed electrical signal analysis, jitter and noise characterization, and TDR/TDT measurements

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