TEKTRONIX

80E01

The Tektronix 80E01 is a single-channel, 50 GHz electrical sampling module designed for high-bandwidth electrical signal analysis. It is compatible with Tektronix TDS8000, TDS8200, CSA8000, CSA8200, DSA8200, and DSA8300 series digital serial analyzers and sampling oscilloscopes. It provides precise time-domain reflectometry (TDR) and high-fidelity signal capture for high-speed serial designs.

SPECIFICATIONS

General

Interfaces	Mainframe proprietary internal interface
Display	None (uses host mainframe display)
Warm-up Time	20 minutes
Calibration Interval	1 year

Physical

Power Supply	Powered directly by host mainframe slot
Operating Temperature	10 °C to 40 °C °C
Dimensions (W×H×D)	79 mm × 25 mm × 135 mm mm
Weight	0.4 kg

Signal Fidelity & Bandwidth Specifications

Analog Bandwidth (-3 dB)	50 GHz
Rise Time (10% to 90%)	≤ 7.0 ps
RMS Noise (Typical)	280 µV
RMS Noise (Maximum)	450 µV

Vertical & Electrical Specifications

Number of Channels	1
Input Impedance	50 Ω
Input Connector Type	2.4 mm female
Dynamic Range (Full Scale)	1.0 V p-p
Offset Range	±1.6 V
Vertical Scale Factor Range	2 mV/div to 100 mV/div
Maximum Non-Destructive Input Voltage	±2.0 V (DC + peak AC)

Host Compatibility & Ordering Options

Compatible Mainframes	DSA8300, DSA8200, CSA8200, CSA8000, TDS8200, TDS8000

Signal Inputs

Input Coupling	DC

Environmental

Storage Temperature	-40 °C to +60 °C
Operating Humidity	20% to 80% RH (noncondensing)
Storage Humidity	5% to 90% RH (noncondensing)
Operating Altitude	3,000 m (9,843 ft.)
Storage Altitude	12,190 m (40,000 ft.)

Physical Characteristics

Module Slot Width	Single-width

Performance

Aberrations (Typical)	10 ps to 20 ps: +2%/-5%; 20 ps to 100 ps: ±1.5%; 100 ps to 5 ns: ±1.0%; 5 ns to 100 ns: ±1.0%
Vertical Resolution	14 bits (mainframe-dependent)

TECHNOLOGY

Equivalent-time sampling

APPLICATIONS

High-speed electrical signal characterization and analysis