TEKTRONIX

80E03

The Tektronix 80E03 is a 2-channel, 20 GHz electrical sampling module designed for high-bandwidth electrical signal analysis. It is compatible with Tektronix digital serial analyzers and sampling oscilloscopes, providing high-precision vertical performance and low-noise measurements for demanding digital communications and high-speed design characterization.

SPECIFICATIONS

General

Interfaces	Proprietary mainframe backplane connector, 2× 3.5 mm female RF input connectors

Physical

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

System & Chassis Architecture

Number of Channels	2
Form Factor	Plug-in sampling module
Compatible Mainframes	Tektronix DSA8300, DSA8200, DSA8000, CSA8000, TDS8200, TDS8000 series

RF, Electrical & Calibration Performance

Frequency Range	DC to 20 GHz
User-Selectable Bandwidth Limits	20 GHz or 12.5 GHz
Rise Time (10% to 90%)	17.5 ps
Rise Time (20% to 80%)	11.7 ps (typical)
RMS Noise at 20 GHz Bandwidth	600 µV (typical), 1.2 mV (maximum)
RMS Noise at 12.5 GHz Bandwidth	450 µV (typical), 800 µV (maximum)
Nominal Impedance	50 Ω
Connector Type	3.5 mm female (SMA compatible)
Dynamic Range	1.0 V p-p
Offset Range	±1.6 V
Maximum Non-Destructive Input Voltage	±2.0 V (DC + peak AC)
Vertical Scale Range	2 mV/div to 200 mV/div
Vertical Resolution	14 bits (mainframe digitized)

Environmental Specifications

Operating Humidity	20% to 80% RH (non-condensing)

Compliance & Certifications

Calibration Interval	1 year

Signal Inputs

Input Coupling	DC

Environmental

Operating Altitude	3,000 m (9,843 ft)
Non-operating Altitude	12,190 m (40,000 ft)

Accessories

Standard Accessories	SMA 50 Ω termination (2), Certificate of Calibration

Performance

Aberrations (10 ps to 100 ps after step)	+3%, -2% (typical)
Aberrations (100 ps to 5 ns after step)	±1% (typical)
Aberrations (5 ns to 100 ns after step)	±0.5% (typical)
Aberrations (>100 ns after step)	±0.2% (typical)

TECHNOLOGY

Sampling Oscilloscope Module

APPLICATIONS

High-Speed Digital Communications and Signal Integrity Analysis

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