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Data Sheet

August 14, 2026

ADVANTEST

Advantest D3286 " 150 Mbps to 12.5 Gbps Error Detector for Error Performance Test System

Advantest D3286 Error Detector 150 Mbps to 12.5 Gbps The Advantest D3286 is the companion error detector to the D3186 PPG covering 150 MHz to 12 GHz (12.5 GHz with Option 72). OEM specification lists NRZ data input 0.1 to 2 Vp-p, threshold minus 2.040 V to plus 2.040 V, clock delay plus or minus 400 ps, simultaneous error rate/count/EI/EFI/frequency measurements, and a 266 × 424 × 550 mm 32 kg 500 VA chassis. Bit error ratio tests of optical and electrical 10G class devices, SDH/SONET frame error split, burst loop-back, and paired D3186 master/slave pattern lock. The Advantest D3286 is the companion error detector to the D3186 PPG covering 150 MHz to 12 GHz (12.5 GHz with Option 72). OEM specification lists NRZ data input 0.1 to 2 Vp-p, threshold minus 2.040 V to plus 2.040 V, clock delay plus or minus 400 ps, simultaneous error rate/count/EI/EFI/frequency measurements, and a 266 × 424 × 550 mm 32 kg 500 VA chassis. Bit error ratio tests of optical and electrical 10G class devices, SDH/SONET frame error split, burst loop-back, and paired D3186 master/slave pattern lock.



MODEL

Advantest D3286

CALIBRATION

Available on request

CONDITION

Used

STATUS

In stock

RFQ / SKU

D3286

LISTING

<https://aumictechlabs.com/products/d3286-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Advantest D3286 is a error detector engineered for precise error performance analysis across digital communication systems operating from 150 Mbps to 12.5 Gbps. This instrument

delivers frame-level synchronization, burst data measurement, and area-specific error detection for SDH/SONET and ATM network evaluation.

Technical Specifications

Operating Range & Data Rates

Frequency range: 150 MHz to 12 GHz (150 MHz to 12.5 GHz with Option 72)

Supported data rates: 150 Mbps to 12.5 Gbps

SDH/SONET frame compatibility: STM-1 (155.52 Mbps) through STM-64 (9.95 Gbps)

Input/Output Interfaces

Data input: DC coupling, NRZ format, 0.1–2 Vp-p amplitude, 2.92 mm connector, 40 mV typical sensitivity with logical inversion capability

Clock input: AC coupling, ± 400 ps delay, 0.5–2 Vp-p amplitude, 2.92 mm connector

Threshold level: –2.040 V to +2.040 V at 0.001 V resolution

Monitor output: Data/Clock with amplifier, 2.92 mm connector

Error output: RZ code TTL pulse via SMA/BNC connectors

Trigger output: Clock/Pattern sync, 1/32 CLK on SMA connector

External interfaces: BNC, SMA, GPIB, Centronics printer

Memory & Pattern Support

Memory capacity: 8 M-bit

PRBS patterns: N = 7, 9, 10, 11, 15, 23, 31

Pattern selection: PRBS, WORD, FRAME (Option 70)

Key Features

Auto-search function optimizes threshold voltage and clock delay settings

Error location function identifies individual error bit positions

Area-specific measurement targets SDH frame and ATM cell analysis

Burst data measurement suited for loop-back testing scenarios

Error rate reporting modes: ERROR RATE, ERROR COUNT, EI, EFI, or FREQ/FAME

Intuitive GUI environment for setup and operation

FD drive storage for measurement results and instrument configuration

Typical Applications

SDH/SONET network performance validation

ATM system error analysis

High-speed digital communication link optimization

Frame synchronization evaluation

Error performance characterization in loop-back test environments

Compatibility & Integration

The D3286 integrates with standard laboratory interfaces including GPIB for remote control and Centronics for hardcopy output. Connector compatibility spans 2.92 mm, SMA, and BNC formats for flexible integration into existing test benches.

D3286 Characteristics / Specifications

PARAMETER	VALUE
Model	D3286
Operating Frequency	150 MHz to 12 GHz 12.5 GHz with Option 72
Data Input Amplitude	0.1 Vp-p to 2 Vp-p
Data Threshold Range 0 V Term	minus 2.040 V to plus 2.040 V 0.001 V steps
Data Threshold Range Minus 2 V Term	minus 1.850 V to minus 0.750 V
Data Input Impedance	approx 50 ohm
Data Connector	2.92 mm plug
Clock Input Amplitude	0.5 Vp-p to 2 Vp-p
Clock Duty	50 percent plus or minus 5 percent
Clock Delay	plus or minus 400 ps 1 ps steps at monitor output
Clock Waveform	sine or rectangular AC coupled DC termination
Input Sensitivity Typical Catalog	40 mV
Patterns	same PRBS WORD FRAME as D3186
Error Rate Display	up to 5 digit mantissa plus exponent
Error Count Integer	lowest 8 digits
Clock Stability Internal	10 ppm per year
External Clock Input	10 MHz 1 Vp-p AC coupled BNC
Trigger Output Levels	HIGH 0 V plus or minus 0.2 V LOW minus 1 V plus or minus 0.2 V 50 ohm
Stretched Error Output	TTL positive approx 100 ns BNC
External Gate Input	0 V / minus 1 V approx 50 ohm BNC
Interface	GPIB IEEE 488 1978 plus Centronics printer
Power Consumption	500 VA max
Mass	32 kg max
Dimensions	approx 266 H x 424 W x 550 D mm
Operating Temperature	0 C to plus 40 C 20 C to 30 C with Option 72

PARAMETER	VALUE
Operating Humidity	40 to 85 percent RH
Line Power	100 to 120 V and 220 to 240 V auto 48 to 63 Hz
Display	green 7 segment LED
Memory Backup	at least 2 weeks after 12 hours power on
Humidity	40 to 85 percent RH

General Specifications & Supplementary Characteristics

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Memory Backup	at least 2 weeks after 12 hours power on Notes From Advantest D3186/D3286 specification bulletin D3286 section. Patterns match the D3186 PPG. Confirm Option 72 12.5 GHz on the installed detector.

Full OEM specifications

Complete technical content extracted from the manufacturer datasheet. Sparse OEM tables are reconstructed as tables below; other text is preserved as paragraphs.

Specifications

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Available from Aumictech

Used and refurbished unit evaluated in-house. Calibration: Available on request. Used · In stock.

Request a quote: sales@aumictech.com · +1 (484) 841-9341

Aumictech

788 S 500 E, Pleasant Grove, UT 84062
sales@aumictech.com · +1 (484) 841-9341
<https://aumictechlabs.com>

NIST-traceable calibration · SAM registered ·
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Technical content from manufacturer specifications. Unit photo/stock from Aumictech listing when available. Specifications subject to OEM documentation and unit condition.