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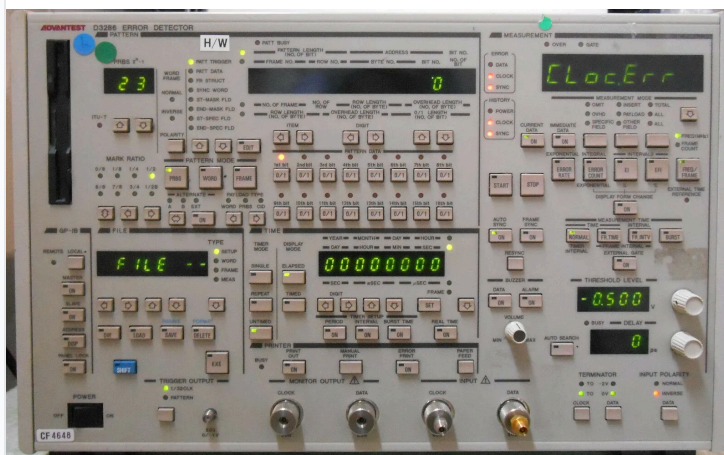
Data Sheet

August 15, 2026

ADVANTEST

Advantest D3281 – Error Detector for Error Performance Test System

Interface Class: high-speed data path with matching BERT Companion Role: Q monitor for D3186/D3286 generation Clock Class: BERT-synchronized Q measurement From Advantest discontinued EMI list (D3281 Q monitor with D3186/D3286 error-performance family). Q-range, decision threshold, and bit-rate coverage are on the D3281 specification sheet. Companion Role: Q monitor for D3186/D3286 generation Clock Class: BERT-synchronized Q measurement From Advantest discontinued EMI list (D3281 Q monitor with D3186/D3286 error-performance family). Q-range, decision threshold, and bit-rate coverage are on the D3281 specification sheet.



MODEL

Advantest D3281

CALIBRATION

Available on request

CONDITION

Used

STATUS

In stock

RFQ / SKU

D3281

LISTING

<https://aumictechlabs.com/products/d3281-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Advantest D3281 is an error detector module engineered for error performance testing in high-speed digital communication systems. It identifies and counts transmission errors with precision, enabling reliable assessment of data integrity across telecommunications and data communication networks. The D3281 integrates into Advantest's error performance testing ecosystem alongside pulse pattern generators and transmission analyzers. Technical Specifications The D3281 measures error performance across multiple metrics: error rate, error

count, error second (ES), error-free second (EFS), and frequency/frame (FREQ/FRAME) modes. Input amplitude ranges from 0.1 to 2 Vp-p. Threshold level setup spans -2.040 to +2.040 V, with typical input sensitivity of 40 mV. The detector supports PRBS test patterns and programmable patterns for comprehensive signal validation. Error detection distinguishes between INSERT (0→1) and OMITT (1→0) errors separately. SDH/SONET frame synchronization capability suits system-level evaluation requirements.

Key Features

- Simultaneous error identification and counting for high-speed digital signals
- Multiple measurement modes: error rate, error count, ES, EFS, FREQ/FRAME PRBS and programmable pattern support
- SDH/SONET frame synchronization
- Monitor output for input data and clock observation during bit error measurement
- User interface optimized for efficient operation
- GPIB control interface
- Data storage via FD drive for measurement results and setup configurations

Electrical Characteristics

- Input amplitude tolerance: 0.1 to 2 Vp-p.
- Threshold adjustment range: -2.040 to +2.040 V.
- Input sensitivity: 40 mV (typ.).

Typical Applications

- Bit error rate testing in digital transmission systems, error performance validation in telecommunications infrastructure, data communication link assessment, and quality assurance for high-speed signal integrity.

Compatibility & Integration

The D3281 operates within Advantest's modular error performance testing framework, integrating with pulse pattern generators, transmission analyzers, and related error detection modules. GPIB interface enables system-level automation and control. NIST traceable calibration is available, with annual recalibration recommended for measurement accuracy assurance.

D3281 Characteristics / Specifications

PARAMETER	VALUE
Model	D3281
Instrument Type	Q monitor
Family Role	error performance test systemQmonitor
Related Ppg	D3186 pulse pattern generator
Related Ed	D3286 error detector 150 Mbps to 12.5 Gbps
Related 3 Gbps Ed	D3273 3 Gbit/s error detector
Manufacturer	Advantest
Use Case	Q-factor / error performance monitor
Literature	Advantest discontinued EMI product list D3281 Q monitor
Family	Advantest error performance test systems
Documentation Type	OEM D3281 listing
Brand Lineage	Advantest
System Role	Q monitor
Form Factor	benchtop error-performance instrument
Application Class	high-speed digital and optical linkQevaluation
Remote Class	GPIO class BERT remote
Operating Temperature Class	laboratory BERT
Year Class	Advantest error performance family
Vendor Path	Advantest
Measurement Class	Q monitor / error performance
Documentation Class	OEM BERT catalog
Interface Class	high-speed data path with matching BERT
Companion Role	Q monitor for D3186/D3286 generation
Clock Class	BERT-synchronizedQmeasurement
Operating temperature	Class: laboratory BERT

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
Operating temperature	Class: laboratory BERT
Operating Temperature	Class: laboratory BERT
Operating Temperature Class	laboratory BERT
Year Class	Advantest error performance family
Vendor Path	Advantest
Measurement Class	Q monitor / error performance
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Companion Role	Q monitor for D3186/D3286 generation
Clock Class	BERT-synchronizedQmeasurement Notes From Advantest discontinued EMI list (D3281 Q monitor with D3186/D3286 error-performance family). Q-range, decision threshold, and bit-rate coverage are on the D3281 specification sheet.

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.

Performance Test Systems

Overview

The Advantest D3281 is listed by Advantest asQmonitor in the error-performance test-system family (alongside D3186 pulse-pattern generator and D3286 error detector). OEM discontinued-product tables classify D3281 asQmonitor, used to evaluate Q-factor / error-performance of high-speed digital and optical links in the same generation as Advantest 12.5 Gbps BERT equipment.

Applications

Q-factor / error-performance monitoring with Advantest BERT systems.

Key FeaturesQmonitor

Error performance test family

Works with D3186/D3286 generation

Advantest optical/digital BERT

GPIO class remote

Technical Specifications

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Year Class	Advantest error performance family

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Measurement Class	Q monitor / error performance
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Notes

From Advantest discontinued EMI list (D3281 Q monitor with D3186/D3286 error-performance family). Q-range, decision threshold, and bit-rate coverage are on the D3281 specification sheet.

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>

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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.