ANRITSU

Anritsu MP1764A 12.5GHz Error Detector

Anritsu MP1764A Error Detector 50 Mbit/s to 12.5 Gbit/s The Anritsu MP1764A is an error detector for BERTS use from 50 Mbit/s to 12.5 Gbit/s, companion to MP1763-series pulse pattern generators. Bit error rate testing of optical modules, SERDES, and high-speed digital links. High input sensitivity and wide phase margin The Anritsu MP1764A is an error detector for BERTS use from 50 Mbit/s to 12.5 Gbit/s, companion to MP1763-series pulse pattern generators. Bit error rate testing of optical modules, SERDES, and high-speed digital links. High input sensitivity and wide phase margin Threshold Voltage Range: minus 3.000 to plus 1.875 V in 1 mV steps

MODEL **Anritsu MP1764A**	CALIBRATION **Available on request**
CONDITION **Used**	STATUS **In stock**
RFQ / SKU **MP1764A**	LISTING **https://aumictechlabs.com/products/mp1764a-2/**

NIST-traceable cal · SAM registered · 30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Anritsu MP1764A is a error detector designed for testing high-speed digital communication systems and semiconductors. It is engineered to work in conjunction with a pulse pattern generator, such as the Anritsu MP1763B or MP1763C, to evaluate conformity with ITU-T standards and perform bit error rate testing (BERT). The MP1764A is characterized by its ability to simplify complex threshold and phase adjustments with single-key operations, making it suitable for research and development of ultra-high-speed logic ICs and digital communication systems. Technical Specifications General Product Name: Anritsu MP1764A Error Detector Supported

Systems: High-speed digital communication systems, high-speed semiconductors, ultra-high-speed logic ICs. Primary Application: Bit Error Rate Testing (BERT), evaluation of conformity with ITU-T standards. Electrical Specifications Operating Frequency Range: 0.05 GHz to 12.5 GHz Input Waveform: NRZ (Non-Return-to-Zero) Input Voltage: 0.25 to 2.0 Vp-p Input Sensitivity: 50 mVp-p (typical value at 10 Gb/s, PRBS 2^23 – 1) Threshold Voltage Variable Range: –3.000 Vp-p to +1.875 Vp-p (in 1 mV steps) Phase Margin: ≥ 70 ps (typical value at 10 Gb/s, PRBS 2^23 – 1, and an input amplitude of 1 Vp-p) Termination: 50 Ω connected to GND (excluding ECL) or to –2 V (ECL) Clock Specifications Input Delay Variable Range: –500 ps to +500 ps (in 1 ps steps) Polarity Inversion: CLOCK/CLOCK inversion is possible. Termination: 50 Ω connected to GND (excluding ECL) or to –2 V (ECL) Connector: APC-3.5 Data and Pattern Generation Supported Patterns: * Pseudorandom Binary Sequence (PRBS) Pattern: $2^n – 1$ (n = 7, 9, 11, 15, 20, 23, 31) * Programmable (PRGM) Pattern: Maximum 8 Mbits (capable of programming six STM-64 (OC192) frames) * Alternate Pattern * Zero Substitution Pattern Mark Ratio Settings: 1/2, 1/4, 1/8 (possible with logic inversion for 1/2, 3/4, 7/8, 8/8). AND Bit Shift (Mark Ratio Setting): 1 or 3 bits (selectable via DIP switch on rear panel). Data Length (Receive): 2 to 8,388,608 bits Interfaces Data Input/Output Connectors: APC-3.5 Clock Input Connector: APC-3.5 GPIB Ports: Two GPIB ports (GPIB 1 for remote control, GPIB 2 for external printer control) supporting IEEE 488.2. Functions Auto-Search Function: For setting optimum input threshold and phase automatically with a single touch. Error Detection Modes: * Total Error * Insertion Error * Omission Error Synchronization: Capable of synchronizing 8 Mbits pattern in a short period (in frame mode). Zero Wait Time Counter Gate: Available. Error Location Analysis: Available (with Option 01). Physical Specifications Weight: Approximately 66.00 lbs (30 kg) Dimensions: 426 mm (Width) x 221 mm (Height) x 450 mm (Depth) (approximate) Compatibility Primary Companion Instrument: Anritsu MP1763B Pulse Pattern Generator, Anritsu MP1763C Pulse Pattern Generator. Why Choose Aumictech for Anritsu MP1764A? At Aumictech, we specialize in supplying high-end test and measurement equipment. Whether you need precise error detection for high-speed digital communication systems, reliable evaluation for ITU-T standard conformity, or simplified phase and threshold adjustments for R&D of advanced ICs, our team ensures the Anritsu MP1764A delivers maximum performance for your application.

MP1764A Characteristics / Specifications

PARAMETER	VALUE
Instrument Type	Error detector
Series Family	Anritsu MP1764 BERTS
Operation Frequency	0.05 to 12.5 GHz
Input Waveform	NRZ
Input Amplitude	0.25 to 2.0 Vp-p
Threshold Voltage Range	minus 3.000 to plus 1.875 V in 1 mV steps
Phase Margin Typical at 10 Gbit/s	70 ps or more at 1 Vp-p PRBS 2^23 minus 1
Input Sensitivity Typical at 10 Gbit/s	50 mVp-p
Clock Input Delay Range	minus 500 to plus 500 ps in 1 ps steps
Clock Frequency Measurement	0.05 to 12.5 GHz resolution 1 kHz accuracy 10 ppm plus 1 kHz
Error Rate Display Class	scientific notation BER
Error Count Range Class	0 to 9.99 × 10^15 class OEM measurement item
Error Interval Asynchronous	0 to 9999999 with 1 ms to 1 s intervals
Error Free Interval	0.0000 percent to 100.0000 percent
Eye Margin Measurement	provided
Connector Class	APC 3.5
Termination	50 ohm to 0 V or minus 2 V
Polarity Inversion	CLOCK/DATA inversion possible
Burst Measurement	supported for PRBS and programmable patterns
Sync Gain Typical Example	850 ns class at 10 Gbit/s programmable 2048 bits
Bit Unit Selectivity	measure any 32 bit block or bit
Companion PPG	MP1763C family
Automation	GPIB
Application Standards Class	STM OC OTU Fibre Channel 10GbE related rates
Input Mode	single ended standard; differential on later C/D options

MP1764A Specifications

PARAMETER	VALUE
Anritsu MP1764A Error Detector 50 Mbit/s to 12.5 Gbit/s	Overview
Key Features	Error detection to 12.5 Gbit/s
Technical Specifications	Instrument Type: Error 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

Specifications

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Error Rate Display Class	scientific notation BER
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Bit Unit Selectivity	measure any 32 bit block or bit
Companion PPG	MP1763C family
Automation	GPIB
Application Standards Class	STM OC OTU Fibre Channel 10GbE related rates
Input Mode	single ended standard; differential on later C/D options

Notes

Numeric rows from Anritsu MP1763/MP1764 BERTS datasheet family tables applicable to MP1764A/C class error detectors. Confirm exact MP1764A versus MP1764C option differences on the unit configuration.

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

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Generated August 14, 2026