

**Aumictech**

Test & measurement · bought, sold, repaired, calibrated

Data Sheet

August 12, 2026

ANRITSU

Anritsu MP1776A Error Detector – 4-Channel, 12.5 Gbps 4 X MU177601B

Anritsu Bit Error Rate Testers (BERT). Resolution: 1 kHz, Accuracy: 10 ppm $\pm$ 1 kHz.



MODEL

**Anritsu
MP1776A/MU177601B**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

MP1776A/MU177601B

LISTING

<https://aumictechlabs.com/products/mp1776a-mu177601b-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Anritsu MP1776A is a 4-channel error detector for high-speed digital communication system testing. It performs simultaneous or independent Bit Error Rate (BER) measurements across channels at rates from 100 Mbps to 12.5 Gbps per channel, scaling to 50 Gbps in 4-channel combined mode. The mainframe accommodates four MU177601B 12.5 Gbps Error Detector Units in flexible single-channel, 2-channel combined, and 4-channel combined configurations. This architecture supports testing of multiplexing and de-multiplexing units across research, development, and manufacturing environments for 40 Gbps transmission equipment. Technical Specifications Clock Frequency Measurement: 100 MHz to 12.5 GHz (independent mode) 0.2 to 25 GHz (2-channel combined) 0.4 to 50 GHz (4-channel combined) Resolution: 1 kHz Accuracy: 10 ppm $\pm$ 1 kHz Error Measurement Ranges: Error Ratio: 0.0000×10^{-16} to 1.0000×10^0 Error Count: 0 to 9,999,999; 1.0000×10^7 to 9.9999×10^{16} Data Patterns: PRBS: $2^n - 1$ ($n = 7, 9, 11, 15, 20, 23, 31$) Zero Substitution: 2^n ($n = 7, 9, 11, 15$) with consecutive zero insertion up to pattern length - 1

Programmable patterns: 2 to 8,388,608 bits (independent); 4 to 16,777,216 bits (2-channel); 8 to 33,554,432 bits (4-channel) Maximum 32 Mbit programmable pattern at 4-channel combined mode Internal pattern memory: 8 Mbits per Error Detector Unit Logic Inversion: Positive/negative switching Synchronization & Detection: Synchronization Methods: Normal, Frame Error Detection Modes: Insertion, Omission, Total Burst Data BER measurement supported for optical circulating loop tests Key Features Graphical User Interface with large color LCD, touch screen, mouse, rotary encoder, and front panel keys Remote control via SCPI commands over GPIB or parallel interface Internal pattern editor; optional MX177601A SDH/SONET Pattern Editor software NRZ input waveform Typical Applications High-speed transmission equipment development and validation Multiplexer and de-multiplexer unit testing Manufacturing test and quality assurance for 40 Gbps systems Compatibility & Integration Configuration: 4 × MU177601B 12.5 Gbps Error Detector Units Compliance: LVD EN61010-1: 1993/A2, 1995 (Installation Category II, Pollution Degree 2) Product Status: Discontinued July 2006

Features & description

From manufacturer datasheet

Technical Specifications

100 MHz to 12.5 GHz (independent mode) 0.2 to 25 GHz (2-channel combined) 0.4 to 50 GHz (4-channel combined) Resolution: 1 kHz Accuracy: 10 ppm ± 1 kHz Error Measurement Ranges: Error Ratio: 0.0000×10^{-16} to 1.0000×10^0 Error Count: 0 to 9,999,999; 1.0000×10^7 to 9.9999×10^{16} Data Patterns: PRBS: $2^n - 1$ ($n = 7, 9, 11, 15, 20, 23, 31$) Zero Substitution: 2^n ($n = 7, 9, 11, 15$) with consecutive zero insertion up to pattern length – 1 Programmable patterns: 2 to 8,388,608 bits (independent); 4 to 16,777,216 bits (2-channel); 8 to 33,554,432 bits (4-channel) Maximum 32 Mbit programmable pattern at 4-channel combined mode Internal pattern memory: 8 Mbits per Error Detector Unit Logic Inversion: Positive/negative switching Synchronization & Detection: Synchronization Methods: Normal, Frame Error Detection Modes: Insertion, Omission, Total Burst Data BER measurement supported for optical circulating loop tests

Key Features

Graphical User Interface with large color LCD, touch screen, mouse, rotary encoder, and front panel keys Remote control via SCPI commands over GPIB or parallel interface Internal pattern editor; optional MX177601A SDH/SONET Pattern Editor software NRZ input waveform

Compatibility & Integration

Configuration: 4 $\times$ MU177601B 12.5 Gbps Error Detector Units Compliance: LVD EN61010-1: 1993/A2, 1995 (Installation Category II, Pollution Degree 2) Product Status: Discontinued July 2006

Anritsu MP1776A/MU177601B — Repair & Calibration Service

Aumictech offers NIST-traceable calibration and repair for the Anritsu MP1776A/MU177601B. All calibrations are performed to NIST-traceable standards and ship with a certificate. Turnaround is typically 1–3 business days after receipt. Standard Cal Pass/fail cert + NIST sticker Cal with Data Full NIST cert with measured values Request Calibration → Request Repair Quote →

Anritsu MP1776A/MU177601B price

This Anritsu MP1776A/MU177601B is listed at . Calibration is available separately from . Contact us for volume pricing or if you need multiple units.

Anritsu MP1776A/MU177601B calibration cost

NIST-traceable calibration for the Anritsu MP1776A/MU177601B is (standard — pass/fail certificate and calibration sticker) or (full measured data at every test point, reference standards documented, traceability chain included). Turnaround is 1 to 3 business days after receipt. See full calibration details →

Applications

High-speed transmission equipment development and validation Multiplexer and de-multiplexer unit testing Manufacturing test and quality assurance for 40 Gbps systems

Unit notes

The Anritsu MP1776A is a 4-channel error detector for high-speed digital communication system testing. It performs simultaneous or independent Bit Error Rate (BER) measurements across channels at rates from 100 Mbps to 12.5 Gbps per channel, scaling to 50 Gbps in 4-channel combined mode. The mainframe accommodates four MU177601B 12.5 Gbps Error Detector Units in flexible single-channel, 2-channel combined, and 4-channel combined configurations. This architecture supports testing of multiplexing and de-multiplexing units across research, development, and manufacturing environments for 40 Gbps transmission equipment.

Technical Specifications

Clock Frequency Measurement: 100 MHz to 12.5 GHz (independent mode) 0.2 to 25 GHz (2-channel combined) 0.4 to 50 GHz (4-channel combined)

Resolution: 1 kHz Accuracy: 10 ppm ± 1 kHz Error Measurement Ranges: Error Ratio: 0.0000×10^{-16} to 1.0000×10^0 Error Count: 0 to 9,999,999; 1.0000×10^7 to 9.9999×10^{16} Data Patterns: PRBS: $2^n - 1$ ($n = 7, 9, 11, 15, 20, 23, 31$) Zero Substitution: 2^n ($n = 7, 9, 11, 15$) with consecutive zero insertion up to pattern length - 1 Programmable patterns: 2 to 8,388,608 bits (independent); 4 to 16,777,216 bits (2-channel); 8 to 33,554,432 bits (4-channel) Maximum 32 Mbit programmable pattern at 4-channel combined mode Internal pattern memory: 8 Mbits per Error Detector Unit Logic Inversion: Positive/negative switching Synchronization & Detection: Synchronization Methods: Normal, Frame Error Detection Modes: Insert

MP1776A/MU177601B Specifications

PARAMETER	VALUE
Frequency Range	100 MHz to 12.5 GHz (independent)

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.

Anritsu Bit Error Rate Testers (BERT). Resolution: 1 kHz, Accuracy: 10 ppm ±1 kHz.

The Anritsu MP1776A is a 4-channel error detector for high-speed digital communication system testing. It performs simultaneous or independent Bit Error Rate (BER) measurements across channels at rates from 100 Mbps to 12.5 Gbps per channel, scaling to 50 Gbps in 4-channel combined mode. The mainframe accommodates four MU177601B 12.5 Gbps Error Detector Units in flexible single-channel, 2-channel combined, and 4-channel combined configurations.

This architecture supports testing of multiplexing and de-multiplexing units across research, development, and manufacturing environments for 40 Gbps transmission equipment.

Aumictech offers NIST-traceable calibration and repair for the Anritsu MP1776A/MU177601B. All calibrations are performed to NIST-traceable standards and ship with a certificate. Turnaround is typically 1-3 business days after receipt.

MP1776A/MU177601B Specifications

PARAMETER	VALUE
Frequency Range	100 MHz to 12.5 GHz (independent)

Technical Specifications

100 MHz to 12.5 GHz (independent mode) 0.2 to 25 GHz (2-channel combined) 0.4 to 50 GHz (4-channel combined)

Resolution: 1 kHz Accuracy: 10 ppm ±1 kHz Error Measurement Ranges: Error Ratio: 0.0000×10^{-16} to 1.0000×10^0 Error Count: 0 to 9,999,999; 1.0000×10^7 to 9.9999×10^{16} Data Patterns: PRBS: $2^n - 1$ (n = 7, 9, 11, 15, 20, 23, 31) Zero Substitution: 2^n (n = 7, 9, 11, 15) with consecutive zero insertion up to pattern length - 1 Programmable patterns: 2 to 8,388,608 bits (independent); 4 to 16,777,216 bits (2-channel); 8 to 33,554,432 bits (4-channel) Maximum 32 Mbit programmable pattern at 4-channel combined mode Internal pattern memory: 8 Mbits per Error Detector Unit Logic Inversion: Positive/negative switching Synchronization & Detection: Synchronization Methods: Normal, Frame Error Detection Modes: Insertion, Omission, Total Burst Data BER measurement supported for optical circulating loop tests

Key Features

Graphical User Interface with large color LCD, touch screen, mouse, rotary encoder, and front panel keys Remote control via SCPI commands over GPIB or parallel interface Internal pattern editor; optional MX177601A SDH/SONET Pattern Editor software NRZ input waveform

Compatibility & Integration

Configuration: 4 × MU177601B 12.5 Gbps Error Detector Units Compliance: LVD EN61010-1: 1993/A2, 1995 (Installation Category II, Pollution Degree 2) Product Status: Discontinued July 2006

Anritsu MP1776A/MU177601B – Repair & Calibration Service

Aumictech offers NIST-traceable calibration and repair for the Anritsu MP1776A/MU177601B. All calibrations are performed to NIST-traceable standards and ship with a certificate. Turnaround is typically 1-3 business days after receipt.

Standard Cal Pass/fail cert + NIST sticker Cal with Data Full NIST cert with measured values

Request Calibration → Request Repair Quote →

Anritsu MP1776A/MU177601B price

This Anritsu MP1776A/MU177601B is listed at . Calibration is available separately from . Contact us for volume pricing or if you need multiple units.

Anritsu MP1776A/MU177601B calibration cost

NIST-traceable calibration for the Anritsu MP1776A/MU177601B is (standard – pass/fail certificate and calibration sticker) or (full measured data at every test point, reference standards documented, traceability chain included). Turnaround is 1 to 3 business days after receipt. See full calibration details →

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 ·
30-day returns
NAICS 423690 · 811210 · 541380
Generated August 12, 2026

Technical content from manufacturer specifications. Unit photo/stock from Aumictech listing when available. Specifications subject to OEM documentation and unit condition.