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August 14, 2026

ANRITSU

# Anritsu MU181040A 12.5Gb/s Error Detector Module

The Anritsu MU181040A is a 12.5 Gbit/s error detector plug-in module for Anritsu Signal Quality Analyzer platforms, pairing with MU181020A 12.5 Gbit/s PPG modules. OEM MP1900A-related module tables list MU181040A as the 12.5 Gbit/s ED for mid-rate serial BER applications. 12.5 Gbit/s serial BER testing, mid-rate SERDES validation, and modular PPG/ED systems. Host Platform Class: Anritsu Signal Quality Analyzer Pattern Support Class: PRBS DATA patterns class Jitter Tolerance Class: With host jitter options class Status Reporting: Host status system class Form Factor Height Class: Single module slot class From Anritsu MU181040A 12.5 Gbit/s ED module naming and SQA module tables. Confirm exact amplitude and sensitivity on the module datasheet.



MODEL

**Anritsu  
MU181040A**

CALIBRATION

**Available on  
request**

CONDITION

**Used**

STATUS

**In stock**

RFQ / SKU

**MU181040A**

LISTING

<https://aumictechlabs.com/products/mu181040a-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

## This unit

The Anritsu MU181040A is a 12.5 Gb/s error detector module engineered for precise error detection and signal integrity analysis in high-speed digital communication systems. This plug-in module integrates into Anritsu Signal Quality Analyzer (SQA) mainframes - including the MP1800A and MT1810A - to enable accurate testing across research, development, manufacturing, and

quality assurance workflows. The MU181040A operates at maximum data rates of 12.50 Gb/s and maximum clock rates of 12.5 GHz, supporting PRBS, data, zero-substitution, mixed, and sequence patterns with 128 Mbits of user-programmable pattern memory. Technical Specifications  
Maximum Data Rate: 12.50 Gb/s Maximum Clock Rate: 12.5 GHz Module Type: Plug-in Error Detector (ED) for SQA series mainframes Host Mainframes: MP1800A Signal Quality Analyzer, MT1810A Pattern Memory: 128 Mbits user-programmable capacity Key Features Supports PRBS, data, zero-substitution, mixed, and sequence patterns Scalable architecture: two modules achieve 25 Gb/s; four modules achieve 50 Gb/s Compatible with other detector modules (MU181020A/B) for expanded frequency band coverage within a single mainframe Optional jitter modulation (MU181040A-001) and variable clock delay (MU181040A-030) configurations Clock recovery option (-x20) for frequency band adjustment on MU181040A/B modules Calibration (CAL) option available Typical Applications Research and development of high-speed logic, ICs, and digital systems Testing of optical modulators Error detection and analysis in high-speed data transmission links Signal integrity optimization in digital communication networks Compatibility & Integration The MU181040A integrates into Anritsu SQA mainframes as a modular error detector. Multi-module configurations support higher aggregate data rates. Specific slot configurations and master module dependencies apply when combining MU181040A units with other module types.

# MU181040A Characteristics / Specifications

| PARAMETER                   | VALUE                              |
|-----------------------------|------------------------------------|
| Instrument Type             | Error detector module              |
| Bit Rate Class              | 12.5 Gbit/s class                  |
| Series Family               | MU181040A                          |
| Related PPG                 | MU181020A 12.5 Gbit/s PPG          |
| Form Factor                 | Plug in module                     |
| Host Platform Class         | Anritsu Signal Quality Analyzer    |
| Pattern Support Class       | PRBS DATA patterns class           |
| Connector Class             | High speed coaxial class           |
| Remote Control              | Via host GPIB LAN                  |
| Power                       | Supplied by host                   |
| Operating Temperature Class | Host laboratory range class        |
| Clock Input Class           | External or recovered clock class  |
| Error Counting              | Bit error counters                 |
| Input Sensitivity Class     | 12.5G ED sensitivity class         |
| Warmup Class                | Per host recommendation            |
| Calibration                 | Module level ED calibration class  |
| Export Classification Class | Commercial BERT module class       |
| Channel Count Class         | Single channel class               |
| Impedance Class             | 50 ohms class                      |
| Jitter Tolerance Class      | With host jitter options class     |
| Status Reporting            | Host status system class           |
| Form Factor Height Class    | Single module slot class           |
| Operating temperature       | Class: Host laboratory range class |

# MU181040A Specifications

| PARAMETER                               | VALUE                                                                                                                                       |
|-----------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|
| Anritsu MU181040A 12.5 Gbit/s ED Module | Overview                                                                                                                                    |
| Applications                            | 12.5 Gbit/s serial BER testing, mid-rate SERDES validation, and modular PPG/ED systems.                                                     |
| Key Features                            | 12.5 Gbit/s error detector                                                                                                                  |
| Technical Specifications                | Instrument Type: Error detector module                                                                                                      |
| Notes                                   | From Anritsu MU181040A 12.5 Gbit/s ED module naming and SQA module tables. Confirm exact amplitude and sensitivity on the module datasheet. |

# General Specifications & Supplementary Characteristics

| PARAMETER                   | VALUE                                                                                                                                                                      |
|-----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Operating temperature       | Class: Host laboratory range class                                                                                                                                         |
| Operating Temperature       | Class: Host laboratory range class                                                                                                                                         |
| Operating Temperature Class | Host laboratory range class                                                                                                                                                |
| Clock Input Class           | External or recovered clock class                                                                                                                                          |
| Error Counting              | Bit error counters                                                                                                                                                         |
| Input Sensitivity Class     | 12.5G ED sensitivity class                                                                                                                                                 |
| Warmup Class                | Per host recommendation                                                                                                                                                    |
| Calibration                 | Module level ED calibration class                                                                                                                                          |
| Export Classification Class | Commercial BERT module class                                                                                                                                               |
| Channel Count Class         | Single channel class                                                                                                                                                       |
| Impedance Class             | 50 ohms class                                                                                                                                                              |
| Jitter Tolerance Class      | With host jitter options class                                                                                                                                             |
| Status Reporting            | Host status system class                                                                                                                                                   |
| Form Factor Height Class    | Single module slot class Notes From Anritsu MU181040A 12.5 Gbit/s ED module naming and SQA module tables. Confirm exact amplitude and sensitivity on the module datasheet. |

# 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                                                                                                                              |                                   |
| PARAMETER                                                                                                                                   | VALUE                             |
| Instrument Type                                                                                                                             | Error detector module             |
| Bit Rate Class                                                                                                                              | 12.5 Gbit/s class                 |
| Series Family                                                                                                                               | MU181040A                         |
| Related PPG                                                                                                                                 | MU181020A 12.5 Gbit/s PPG         |
| Form Factor                                                                                                                                 | Plug in module                    |
| Host Platform Class                                                                                                                         | Anritsu Signal Quality Analyzer   |
| Pattern Support Class                                                                                                                       | PRBS DATA patterns class          |
| Connector Class                                                                                                                             | High speed coaxial class          |
| Remote Control                                                                                                                              | Via host GPIB LAN                 |
| Power                                                                                                                                       | Supplied by host                  |
| Operating Temperature Class                                                                                                                 | Host laboratory range class       |
| Clock Input Class                                                                                                                           | External or recovered clock class |
| Error Counting                                                                                                                              | Bit error counters                |
| Input Sensitivity Class                                                                                                                     | 12.5G ED sensitivity class        |
| Warmup Class                                                                                                                                | Per host recommendation           |
| Calibration                                                                                                                                 | Module level ED calibration class |
| Export Classification Class                                                                                                                 | Commercial BERT module class      |
| Channel Count Class                                                                                                                         | Single channel class              |
| Impedance Class                                                                                                                             | 50 ohms class                     |
| Jitter Tolerance Class                                                                                                                      | With host jitter options class    |
| Status Reporting                                                                                                                            | Host status system class          |
| Form Factor Height Class                                                                                                                    | Single module slot class          |
| Notes                                                                                                                                       |                                   |
| From Anritsu MU181040A 12.5 Gbit/s ED module naming and SQA module tables. Confirm exact amplitude and sensitivity on the module datasheet. |                                   |

### Available from Aumictech

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

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

#### Aumictech

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

NIST-traceable calibration · SAM registered ·  
30-day returns  
NAICS 423690 · 811210 · 541380  
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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.