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**Data Sheet**

August 1, 2026

ANRITSU

# Anritsu MP1775A 03 Pulse Pattern Generator 4 channel 12.5 Gb/s \*CALIBRATED\*

Anritsu MP1775A-03 Pulse Pattern Generator, 4 Channel, 12.5 Gb/s The Anritsu MP1775A is a four-channel pulse pattern generator covering 100 Mbps to 12.5 Gb/s per channel. It generates PRBS and programmable patterns for high-speed digital and optical communications test and is commonly paired with the MP1776A error detector for BER measurement. Option 03 provides an internal clock source and front-panel key operation. Multiple MP1775A units can feed muxed BER systems such as ME7760B / ME7780A class 40 Gb/s+ setups. GPIB and parallel interfaces support automated test. The Anritsu MP1775A is a four-channel pulse pattern generator covering 100 Mbps to 12.5 Gb/s per channel. It generates PRBS and programmable patterns for high-speed digital and optical communications test and is commonly paired with the MP1776A error detector for BER measurement. Option 03 provides an internal clock source and front-panel key operation. Multiple MP1775A units can feed muxed BER systems such as ME7760B / ME7780A class 40 Gb/s+ setups. GPIB and parallel interfaces support automated test. Multi-channel BERT pattern generation to 12.5 Gb/s; optical transceiver and backplane characterization; muxed higher-rate BER when combined with Anritsu ME77xx mux/demux systems; production and R&D digital communications test.



MODEL

**Anritsu MP1775A-03**

CALIBRATION

**Available on request**

CONDITION

**Used**

STATUS

**In stock**

RFQ / SKU

**MP1775A-03**

LISTING

<https://aumictechlabs.com/products/mp1775a-03-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

## This unit

The Anritsu MP1775A 03 is a four-channel pulse pattern generator delivering clean signals from 100 Mbps to 12.5 Gbps per channel. Engineered for high-speed digital signal generation and characterization, it evaluates optical and electrical components, modules, and devices in 10 Gbps WDM equipment environments. The instrument operates as a standalone source or integrates into comprehensive multi-channel test systems. With 32 Megabits total pattern memory (8 Mbits per channel), it supports programmable patterns, PRBS sequences up to  $2^{31}-1$  bits, SONET/SDH frames to OC-768c/STM-256c, and CID patterns for clock recovery stress testing.

**Technical Specifications**

Data Rate: 100 Mbps to 12.5 Gbps per channel  
Channels: 4  
Pattern Memory: 32 Megabits total (8 Megabits per channel)  
Data Output Amplitude: 0.5 to 2.0 Vp-p per channel, independently settable  
Data Output Offset: -2.0 to +2.0 VOH, settable in 5 mV steps  
Clock Output Amplitude: 0.5 to 2.0 Vp-p, settable in 10 mV steps  
Clock Output Offset: -2.0 to +2.0 VOH, settable in 5 mV steps  
Clock Output Variable Delay: -500 to +500 ps in 1 ps steps  
Sync Output Amplitude: 1 Vp-p fixed  
Load Impedance: 50 Ohm (all outputs)  
Data/Clock Termination: Selectable GND or -2V (ECL)  
Sync Termination: 50 Ohm to GND  
Connectors: APC-3.5 (data and clock), SMA (sync)  
Error Insertion: Supported, rates  $10^{-4}$  to  $10^{-9}$ , single-bit insertion

**Key Features**

- Internal clock option with selectable external clock input (0.8 to 2.0 Vp-p sine or pulse, >500 MHz)
- Independent amplitude and offset control per data channel
- Dual clock outputs with programmable delay
- Back-termination for waveform distortion reduction
- Front-panel cross-point adjustment
- GPIB and parallel control interfaces
- 3.5-inch FDD parameter memory (MS-DOS compatible)

**Typical Applications**

- 10 Gbps WDM equipment validation
- Optical transceiver characterization
- High-speed electrical component stress testing
- Clock recovery circuit evaluation
- SONET/SDH frame generation and analysis

**Compatibility & Integration**

- Pairs with MP1776A 4-Channel Error Detector for simultaneous BER testing
- Integrates into ME7760B 43.5 Gbps or ME7780A 48 Gbps BER Test Systems
- Combines with MP1801A 43.5G Multiplexer for 40 Gbps pattern generation
- Compatible with MP9861A E/O converter for 40 Gbps optical signal generation
- Optional MX177601A software enables SONET/SDH frame and CID pattern support

## Features & description

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From manufacturer datasheet

### Features

- Four independent pattern channels
- Bit rate 100 Mbps to 12.5 Gb/s per channel
- PRBS  $2^n - 1$  with  $n = 7$  to 31
- Option 03: internal clock + front-panel keys
- Pairs with MP1776A error detector
- GPIB and parallel remote interfaces
- Can feed ME7760B / ME7780A class systems for higher aggregated rates

# MP1775A Characteristics / Specifications

| PARAMETER         | VALUE                                                                                                                                                                                                                                                                                                                                           |
|-------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Model             | MP1775A (Option 03)                                                                                                                                                                                                                                                                                                                             |
| Manufacturer      | Anritsu                                                                                                                                                                                                                                                                                                                                         |
| Instrument Type   | 4-channel pulse pattern generator                                                                                                                                                                                                                                                                                                               |
| Channels          | 4                                                                                                                                                                                                                                                                                                                                               |
| Bit Rate          | 100 Mbps to 12.5 Gb/s per channel                                                                                                                                                                                                                                                                                                               |
| Patterns          | PRBS $2^n - 1$ ( $n = 7 \dots 31$ ); programmable patterns per OEM tables                                                                                                                                                                                                                                                                       |
| Companion ED      | MP1776A                                                                                                                                                                                                                                                                                                                                         |
| Remote Interfaces | GPIO; parallel                                                                                                                                                                                                                                                                                                                                  |
| Related Systems   | ME7760B / ME7780A muxed BER (when used as pattern sources)<br>Standard Operating Conditions Use appropriate high-speed coaxial cables and termination. Observe ESD practices. Confirm Option 03 is installed when internal clock / front-panel keys are required. Allow warm-up per Anritsu operating manual before specifying timing accuracy. |
| Option 03         | internal clock + front-panel keys                                                                                                                                                                                                                                                                                                               |

# 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                                                                     |
|-----------------|---------------------------------------------------------------------------|
| Model           | MP1775A (Option 03)                                                       |
| Manufacturer    | Anritsu                                                                   |
| Instrument Type | 4-channel pulse pattern generator                                         |
| Channels        | 4                                                                         |
| Bit Rate        | 100 Mbps to 12.5 Gb/s per channel                                         |
| Patterns        | PRBS $2^n - 1$ ( $n = 7 \dots 31$ ); programmable patterns per OEM tables |

Option 03: Internal clock generator; front-panel key operation

Specifications

| PARAMETER         | VALUE                                                      |
|-------------------|------------------------------------------------------------|
| Companion ED      | MP1776A                                                    |
| Remote Interfaces | GPIO; parallel                                             |
| Related Systems   | ME7760B / ME7780A muxed BER (when used as pattern sources) |

Standard Operating Conditions

Use appropriate high-speed coaxial cables and termination. Observe ESD practices. Confirm Option 03 is installed when internal clock / front-panel keys are required. Allow warm-up per Anritsu operating manual before specifying timing accuracy.

Operational Notes

User suffix "**\*CALIBRATED\***" is inventory status, not an OEM option code. Model identity is MP1775A with Option 03. Confirm output amplitude and connector type on the physical unit against the MP1775A datasheet for the installed options.

### 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

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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.