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Data Sheet

August 12, 2026

ANRITSU

Anritsu MP1900A – BERT Signal Quality Analyzer Mainframe

Anritsu MP1900A Signal Quality Analyzer-R Mainframe The Anritsu Signal Quality Analyzer-R MP1900A is a modular high-performance BERT mainframe with 8 module slots for physical-layer evaluation of high-speed network and bus interfaces (Ethernet, PCIe, USB, PAM4/NRZ links). It offers protocol-aware receiver tests (PCIe/USB link training, LTSSM), multi-channel NRZ/PAM4 expandability, and backwards compatibility with selected MP1800A-series modules. This datasheet covers the mainframe; PPG/ED/jitter performance depends on installed modules. The Anritsu Signal Quality Analyzer-R MP1900A is a modular high-performance BERT mainframe with 8 module slots for physical-layer evaluation of high-speed network and bus interfaces (Ethernet, PCIe, USB, PAM4/NRZ links). It offers protocol-aware receiver tests (PCIe/USB link training, LTSSM), multi-channel NRZ/PAM4 expandability, and backwards compatibility with selected MP1800A-series modules. This datasheet covers the mainframe; PPG/ED/jitter performance depends on installed modules. PCIe Gen 1–6 receiver/link-training tests; USB 3.2 Gen1/2 ×1×2; multi-lane Ethernet/PAM4 (25/50/100/200/400/800G class with modules); NRZ/PAM4 BER; jitter/noise tolerance; stressed-eye and emphasis/ISI channel emulation (module-dependent).



MODEL

Anritsu MP1900A

CALIBRATION

Available on request

CONDITION

Used

STATUS

In stock

RFQ / SKU

MP1900A

LISTING

<https://aumictechlabs.com/products/mp1900a-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Anritsu MP1900A Signal Quality Analyzer-R is a modular Bit Error Rate Tester (BERT) mainframe engineered for physical layer characterization of high-speed serial interfaces up to 512 Gbit/s. Supporting both NRZ and PAM4 signaling, the 8-slot mainframe accommodates Pulse Pattern Generators, Error Detectors, jitter/noise injection modules, and synthesizers for comprehensive signal quality analysis across Ethernet, PCIe, USB, Thunderbolt, InfiniBand, Fibre Channel, SAS, DisplayPort, and CEI standards.

Technical Specifications

Transmission Capacity: Up to 512 Gbit/s

Mainframe Slots: 8-slot modular architecture

NRZ Operation: 2.4 Gbit/s to 32.1 Gbit/s (up to 64.2 Gbaud); supports up to 16 channels at 32 Gbit/s bandwidth

PAM4 Operation: 2.4 to 64.2 Gbaud; up to 8 channels at 32 Gbit/s or 4 channels at 64 Gbit/s bandwidth

Output Amplitude (Single-end): 0.1 Vp-p to 1.3 Vp-p

Output Amplitude (Differential): 0.2 Vp-p to 2.6 Vp-p

Intrinsic Jitter (PPG): 115 fs rms (typ.)

ED Input Sensitivity: 15 mV typical (EYE Height)

ED Analog Bandwidth: 40 GHz

Emphasis: 10-tap built-in Low-Frequency Equalizer: ≤ 1 GHz, 2 dB typ.

DFE: 1.4 dB typ.

CTLE: Multi-band (8 Gbit/s, 16 Gbit/s, 28 Gbit/s bandwidths)

Key Features

Jitter injection: SJ, RJ, BUJ, SSC

Noise injection: CM, DM, white noise modes

Variable ISI adjustment for intersymbol interference analysis

RS-FEC pattern support with real-time PCIe 6.0 uncorrectable error measurement

PCIe 6.0 Base Specification Receiver Test with Link Training and LTSSM analysis

SRNS support with SKP filtering

USB 3.2 Electrical Compliance Test instrument certification

Typical Applications

Data-center interconnect validation

Ethernet physical layer testing (100 GbE through 800 GbE)

PCIe Gen1–Gen6 compliance and characterization

USB 3.2 Gen1/2 and USB4 link training validation

Thunderbolt signal integrity analysis

InfiniBand, Fibre Channel, SAS, DisplayPort, and CEI-28G/56G/112G measurements

Compatibility & Integration

Remote control: GPIB, LAN (10/100/1000 Base-T)

Peripherals: USB (6×), VGA (1×), HDMI (1×)

Features & description

From manufacturer datasheet

Features

- Module slots: 8
- Display: 12.1-inch WXGA LCD 1280 × 800; resistive touch + rotary encoder + function keys
- Aggregate bandwidth class examples: 32G → 8ch NRZ / 4ch PAM4; 64G → 4ch NRZ / 4ch PAM4 (with modules)
- Operation baud-rate class with modules: 2.4 Gbaud to 64.2 Gbaud
- Protocol awareness: PCIe Link Training; USB Link Training; LTSSM analysis (software options)
- Backwards compatibility with MP1800A series modules (selected)
- Remote: GPIB and Ethernet (auto switchover)
- Interfaces: Ethernet 10/100/1000 Base-T (ext. remote + internal reserved); USB Type-A ×6 (4 front / 2 rear); VGA D-Sub 15; HDMI Type A; functional earth jacks
- OS: Windows 10 (datasheet) / Windows Embedded Standard 7 (some brochure revisions)
- Internal storage: SATA 2.5-inch HDD (tray)
- Internal reference clock: 10 MHz ±1 ppm (accuracy at initial shipment)
- Power: 100–120 / 200–240 VAC auto-switching, 50–60 Hz; 1350 VA max
- Operating temperature: +5°C to +40°C
- Dimensions / mass (excl. modules): 340 (W) × 222.5 (H) × 451 (D) mm; approx. 20 kg

MP1900A Characteristics / Specifications

PARAMETER	VALUE
PCIe Gen	6 receiver/link-training tests; USB 3.2 Gen1/2 ×1/×2; multi-lane Ethernet/PAM4 (25/50/100/200/400/800G class with modules); NRZ/PAM4 BER; jitter/noise tolerance; stressed-eye and emphasis/ISI channel emulation (module-dependent).
Model	MP1900A
Manufacturer	Anritsu
Instrument Type	Signal Quality Analyzer-R / BERT Mainframe
Alias	MP1900A; Anritsu MP1900A; SQA-R MP1900A Main Frame
Module slots	8
LCD	12.1 inch WXGA (1280 × 800)
Input devices	resistance-film touch panel; rotary encoder; function button; power button
LEDs	Power, Power Standby, Disk Access
Ethernet	10/100/1000 Base-T RJ45 ×1 external (remote); ×1 internal reserved
External display	D-Sub 15 VGA ×1; HDMI Type A ×1
USB	front Type-A ×4; rear Type-A ×2; rear remote ×1 class
Remote interface	GPIO, Ethernet external (automatic switchover)
Internal reference clock	10 MHz ±1 ppm (accuracy at initial shipment)
Internal storage	SATA 2.5-inch HDD ×1 (tray loading) OS: Windows 10 (MP1900A datasheet e11900) Power / Environment / Mechanical
Power supply	100–120 VAC / 200–240 VAC automatic switching, 50–60 Hz; operating voltage –10% to +10% of rated
Power consumption	1350 VA
Operating temperature	+5°C to +40°C
Dimensions	340 × 222.5 × 451 mm (W×H×D), protrusions excluded
Mass	20 kg (excluding modules, blank panels, protective cover, power cord) Example module capability (not mainframe-intrinsic; confirm installed hardware)

PARAMETER	VALUE
PAM4 PPG MU196020A class	2.4–32.1/58.2/64.2 Gbaud; amp 70–800 mVp-p SE / 140–1600 mVp-p diff; offset –2 to +3.3 V; 4-tap emphasis –20 to +20 dB; Tr/Tf 8.5 ps typ (20–80%, NRZ); RJ 170 fs rms typ (NRZ)
PAM4 ED MU196040B class	2.4–32.1 Gbaud or to 58.2 Gbaud PAM4 / 64.2 Gbaud NRZ; NRZ input amp 0.05–1.0 Vp-p ($\leq 32.1\text{G}$), etc. Notes Numeric mainframe specs from Anritsu MP1900A Data Sheet (e11900) and brochures. Channel count, baud rate, and sensitivity depend on installed modules/options—verify configuration on the unit. Do not confuse empty mainframe capability with a fully loaded 64G PAM4 system.
Display	12.1-inch WXGA LCD 1280 × 800; resistive touch + rotary encoder + function keys
Aggregate bandwidth class examples	32G → 8ch NRZ / 4ch PAM4; 64G → 4ch NRZ / 4ch PAM4 (with modules)
Operation baud-rate class with modules	2.4 Gbaud to 64.2 Gbaud
Protocol awareness	PCIe Link Training; USB Link Training; LTSSM analysis (software options)
Remote	GPIB and Ethernet (auto switchover)
Interfaces	Ethernet 10/100/1000 Base-T (ext. remote + internal reserved); USB Type-A ×6 (4 front / 2 rear); VGA D-Sub 15; HDMI Type A; functional earth jacks
Power	100–120 / 200–240 VAC auto-switching, 50–60 Hz; 1350 VA max
Dimensions / mass (excl. modules)	340 (W) × 222.5 (H) × 451 (D) mm; approx. 20 kg
Bandwidth	class examples: 32G → 8ch NRZ / 4ch PAM4; 64G → 4ch NRZ / 4ch PAM4 (with modules) - Operation baud-rate class with modules: 2.4 Gbaud to 64.2 Gbaud - Protocol awareness: PCIe Link Training; USB Link Training; LTSSM analysis (software options) - Backw

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
Operating temperature	+5°C to +40°C - Dimensions / mass (excl. modules): 340 (W) × 222.5 (H) × 451 (D) mm; approx. 20 kg
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Model	MP1900A
Manufacturer	Anritsu
Instrument Type	Signal Quality Analyzer-R / BERT Mainframe
Alias	MP1900A; Anritsu MP1900A; SQA-R MP1900A Main Frame
Module slots	8
LCD	12.1 inch WXGA (1280 × 800)
Input devices	resistance-film touch panel; rotary encoder; function button; power button
LEDs	Power, Power Standby, Disk Access
Ethernet	10/100/1000 Base-T RJ45 ×1 external (remote); ×1 internal reserved
External display	D-Sub 15 VGA ×1; HDMI Type A ×1
USB	front Type-A ×4; rear Type-A ×2; rear remote ×1 class
Remote interface	GPIO, Ethernet external (automatic switchover)
Internal reference clock	10 MHz ±1 ppm (initial shipment)
Internal storage	SATA 2.5-inch HDD ×1 (tray loading) OS: Windows 10 (MP1900A datasheet e11900) Power / Environment / Mechanical
Power supply	100–120 VAC / 200–240 VAC automatic switching, 50–60 Hz; operating voltage –10% to +10% of rated
Power consumption	1350 VA
Dimensions	340 × 222.5 × 451 mm (W×H×D), protrusions excluded
Mass	20 kg (excluding modules, blank panels, protective cover, power cord) Example module capability (not mainframe-intrinsic; confirm installed hardware)
PAM4 PPG MU196020A class	2.4–32.1/58.2/64.2 Gbaud; amp 70–800 mVp-p SE / 140–1600 mVp-p diff; offset –2 to +3.3 V; 4-tap emphasis –20 to +20 dB; Tr/Tf 8.5 ps

PARAMETER	VALUE
	typ (20–80%, NRZ); RJ 170 fs rms typ (NRZ)
PAM4 ED MU196040B class	2.4–32.1 Gbaud or to 58.2 Gbaud PAM4 / 64.2 Gbaud NRZ; NRZ input amp 0.05–1.0 Vp-p ($\leq 32.1\text{G}$), etc. Notes Numeric mainframe specs from Anritsu MP1900A Data Sheet (e11900) and brochures. Channel count, baud rate, and sensitivity depend on installed modules/options—verify configuration on the unit. Do not confuse empty mainframe capability with a fully loaded 64G PAM4 system.

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 BERT mainframe with 8 module slots for physical-layer evaluation of high-speed network and bus interfaces (Ethernet, PCIe, USB, PAM4/NRZ links). It offers protocol-aware receiver tests (PCIe/USB link training, LTSSM), multi-channel NRZ/PAM4 expandability, and backwards compatibility with selected MP1800A-series modules. This datasheet covers the mainframe; PPG/ED/jitter performance depends on installed modules.

Applications

PCIe Gen 1–6 receiver/link-training tests; USB 3.2 Gen1/2 ×1/×2; multi-lane Ethernet/PAM4 (25/50/100/200/400/800G class with modules); NRZ/PAM4 BER; jitter/noise tolerance; stressed-eye and emphasis/ISI channel emulation (module-dependent).

Key Features

- Module slots: 8
- Display: 12.1-inch WXGA LCD 1280 × 800; resistive touch + rotary encoder + function keys
- Aggregate bandwidth class examples: 32G → 8ch NRZ / 4ch PAM4; 64G → 4ch NRZ / 4ch PAM4 (with modules)
- Operation baud-rate class with modules: 2.4 Gbaud to 64.2 Gbaud
- Protocol awareness: PCIe Link Training; USB Link Training; LTSSM analysis (software options)
- Backwards compatibility with MP1800A series modules (selected)
- Remote: GPIB and Ethernet (auto switchover)
- Interfaces: Ethernet 10/100/1000 Base-T (ext. remote + internal reserved); USB Type-A ×6 (4 front / 2 rear); VGA D-Sub 15; HDMI Type A; functional earth jacks
- OS: Windows 10 (datasheet) / Windows Embedded Standard 7 (some brochure revisions)
- Internal storage: SATA 2.5-inch HDD (tray)
- Internal reference clock: 10 MHz ±1 ppm (accuracy at initial shipment)
- Power: 100–120 / 200–240 VAC auto-switching, 50–60 Hz; 1350 VA max
- Operating temperature: +5°C to +40°C
- Dimensions / mass (excl. modules): 340 (W) × 222.5 (H) × 451 (D) mm; approx. 20 kg

Technical Specifications

Technical Specifications

PARAMETER	VALUE
Model	MP1900A
Manufacturer	Anritsu
Instrument Type	Signal Quality Analyzer-R / BERT Mainframe
Alias	MP1900A; Anritsu MP1900A; SQA-R MP1900A

Main Frame

Specifications

PARAMETER	VALUE
Module slots	8
LCD	12.1 inch WXGA (1280 × 800)
Input devices	resistance-film touch panel; rotary encoder; function button; power button
LEDs	Power, Power Standby, Disk Access
Ethernet	10/100/1000 Base-T RJ45 ×1 external (remote); ×1 internal reserved

PARAMETER	VALUE
External display	D-Sub 15 VGA ×1; HDMI Type A ×1
USB	front Type-A ×4; rear Type-A ×2; rear remote ×1 class
Remote interface	GPIOB, Ethernet external (automatic switchover)
Internal reference clock	10 MHz ±1 ppm (initial shipment)
Internal storage	SATA 2.5-inch HDD ×1 (tray loading)
OS	Windows 10 (MP1900A datasheet e11900)

Power / Environment / Mechanical

Power / Environment / Mechanical

PARAMETER	VALUE
Power supply	100-120 VAC / 200-240 VAC automatic switching, 50-60 Hz; operating voltage -10% to +10% of rated
Power consumption	1350 VA
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Notes
Numeric mainframe specs from Anritsu MP1900A Data Sheet (e11900) and brochures. Channel count, baud rate, and sensitivity depend on installed modules/options-verify configuration on the unit. Do not confuse empty mainframe capability with a fully loaded 64G PAM4 system.

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

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