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Data Sheet

August 2, 2026

ANRITSU

Anritsu MS9780A – Diffraction-Grating Spectrum Analyzer

Anritsu MS9780A – Diffraction-Grating Optical Spectrum Analyzer The MS9780A provides a diffraction-grating optical spectrum analyzer designed for analyzing optical spectra in the 600 to 1750 nm wavelength band, with an input section supporting 50/62.5 μm core fibers for LD and LED spectral measurements and WDM-oriented characterization. LD and LED spectral measurements; passive optical component transmission characterization (e.g., isolators); optical fiber amplifier NF/Gain evaluation; WDM communications spectrum analysis in the 1.55 μm band; tunable laser tracking and optical pulse measurement workflows. The MS9780A provides a diffraction-grating optical spectrum analyzer designed for analyzing optical spectra in the 600 to 1750 nm wavelength band, with an input section supporting 50/62.5 μm core fibers for LD and LED spectral measurements and WDM-oriented characterization. LD and LED spectral measurements; passive optical component transmission characterization (e.g., isolators); optical fiber amplifier NF/Gain evaluation; WDM communications spectrum analysis in the 1.55 μm band; tunable laser tracking and optical pulse measurement workflows.



MODEL

Anritsu MS9780A

CALIBRATION

Available on request

CONDITION

Used

STATUS

In stock

RFQ / SKU

MS9780A

LISTING

<https://aumictechlabs.com/products/ms9780a-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Anritsu MS9780A is a diffraction-grating spectrum analyzer engineered for high-resolution optical spectrum analysis across 600 to 1750 nm. It delivers precision measurements in research, development, and manufacturing environments, with particular strength in evaluating optical devices, laser and LED sources, passive component transmission characteristics, and optical amplifier performance metrics including noise figure and gain.

Technical Specifications

Wavelength Performance Range: 600 to 1750 nm (0.6 to 1.75 μm) Accuracy: ± 0.3 nm across full range after external light source calibration; ± 0.05 nm in the 1.52 to 1.57 μm band post-calibration
Linearity: ± 0.02 nm Resolution: 0.07 nm minimum (single-mode fiber); 0.1 nm (graded-index fiber); selectable settings at 0.07 $\times 2$, 0.1, 0.2, 0.5, 1.0 nm Level Measurement Range: -90 to $+10$ dBm (1250–1600 nm, attenuator off); -65 to $+20$ dBm (1100–1650 nm, attenuator on) Accuracy: ± 0.6 dB at 1300/1500 nm (-23 dBm, resolution ≥ 0.2 nm); ± 0.1 dB linearity (0 to -50 dBm) Stability: ± 0.1 dB at 1550 nm (-23 dBm, ≥ 0.2 nm resolution, 1 minute) Dynamic Range: >70 dB (high-dynamic range mode); 62 dB (normal mode, 1 nm from peak) Sensitivity: -90 dBm guaranteed; RMS noise ≤ -90 dBm (1.25–1.6 μm) Polarization Dependency: ± 0.15 dB Measurement Parameters Sweep Speed: 0.5 s typical (500 nm sweep width, normal mode, 10 kHz VBW) Sweep Width: 0 to 1200 nm Maximum VBW: 1 MHz Hardware Input Fibers: Single-mode (9.5/125 μm), graded-index (50/125 μm , 62.5/125 μm) Display: 6.4 inch color TFT-LCD Memory: Two-trace storage (A, B) Interfaces: GPIB, RS-232C
Key Features WDM communication measurement capability optimized for 1.55 μm band operation Superior stability and calibration support for demanding metrology applications Multi-fiber input compatibility for diverse test configurations Dual-trace memory for comparative analysis
Typical Applications Laser diode and LED spectral characterization Optical isolator and passive component transmission analysis Optical amplifier noise figure and gain assessment WDM system validation and component qualification

Features & description

From manufacturer datasheet

Features

- Diffraction-grating OSA, 600 to 1750 nm
- Multimode-capable input (50/62.5 μm core fibers)
- -90 dBm guaranteed optical reception sensitivity (attenuator off, specified band)
- -70 dB dynamic range class
- Minimum resolution 0.07 nm (SM fiber)
- WDM application functions; optical pulse measurement; TLS tracking
- Optional wavelength reference light source for automatic wavelength calibration

MS9780A Characteristics / Specifications

PARAMETER	VALUE
Anritsu MS9780A	Diffraction-Grating Optical Spectrum Analyzer Overview The MS9780A provides a diffraction-grating optical spectrum analyzer designed for analyzing optical spectra in the 600 to 1750 nm wavelength band, with an input section supporting 50/62.5 µm core fibers for LD and LED spectral measurements and WDM-oriented characterization.
Model	MS9780A
Manufacturer	Anritsu
Instrument Type	Diffraction-Grating Optical Spectrum Analyzer
Wavelength Range	600 to 1750 nm
Wavelength Accuracy	±0.05 nm (1550 ±20 nm; resolution 0.07 to 0.2 nm; after calibration with wavelength reference light source option)
Minimum Resolution	0.07 nm (SM fiber)
Level Range (attenuator off)	−90 to +10 dBm (1250 to 1600 nm)
Level Range (attenuator on)	−65 to +20 dBm (1100 to 1650 nm)
Dynamic Range	−70 dB class
Optical Sensitivity	−90 dBm guaranteed (specified conditions)
Dimensions	320 (W) × 177 (H) × 350 (D) mm
Mass	less than 16.5 kg
Alias	MS9780A Standard Operating Conditions Use appropriate FC/SC/compatible fiber adapters and observe attenuator on/off level limits for the wavelength band under test. Perform wavelength calibration with the optional reference light source when absolute wavelength accuracy is required. Allow thermal stabilization before precision WDM measurements.
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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

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Operational Notes

MS9780A is discontinued and succeeded in Anritsu’s lineup by later MS9740-class OSAs; confirm inventory faceplate as MS9780A. Distinguish from MS9710/MS9720/MS9740 family units. Alias MS9780A.

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>

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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.