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Data Sheet

August 2, 2026

ANRITSU

Anritsu MS9740A – Optical Spectrum Analyzer

Anritsu MS9740A – Optical Spectrum Analyzer The MS9740A provides a diffraction-grating optical spectrum analyzer covering 600 to 1750 nm with 30 pm minimum resolution and sensitivity to -90 dBm for wavelength-domain characterization of laser diodes, EDFAs, and WDM components. It runs on a Windows operating system and supports single-mode and multimode fiber input with optional Option 009. WDM component and system spectral characterization; EDFA gain and noise figure measurement; laser diode wavelength, linewidth, and SMSR evaluation; optical filter and amplifier spectral analysis; R&D and production test of optical transmitters and receivers. The MS9740A provides a diffraction-grating optical spectrum analyzer covering 600 to 1750 nm with 30 pm minimum resolution and sensitivity to -90 dBm for wavelength-domain characterization of laser diodes, EDFAs, and WDM components. It runs on a Windows operating system and supports single-mode and multimode fiber input with optional Option 009. WDM component and system spectral characterization; EDFA gain and noise figure measurement; laser diode wavelength, linewidth, and SMSR evaluation; optical filter and amplifier spectral analysis; R&D and production test of optical transmitters and receivers.



MODEL

Anritsu MS9740A

CALIBRATION

Available on request

CONDITION

Used

STATUS

In stock

RFQ / SKU

MS9740A

LISTING

<https://aumictechlabs.com/products/ms9740a-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Anritsu MS9740A Optical Spectrum Analyzer delivers precise spectral analysis across the visible to near-infrared band, addressing requirements in R&D and manufacturing environments. This instrument evaluates optical devices SFP, XFP, and SFP+ modules, transceivers, VCSEL and DFB lasers - displaying center wavelength, level, spectrum, SMSR, and OSNR on a single screen. Fast measurement cycles under 0.2 seconds enable rapid device characterization. When paired with a Bit Error Rate Tester, it supports comprehensive analysis of transceiver outputs and WDM signals.

Technical Specifications

Wavelength Range: 600 nm to 1750 nm
Dynamic Range: 58 dB at 0.4 nm from peak (standard); 60 dB at 0.4 nm (high mode); 70 dB at 1 nm from peak
Wavelength Accuracy: ± 20 pm (1520–1620 nm, 0.03–0.2 nm resolution); ± 50 pm (1530–1570 nm, 0.07–0.2 nm resolution); ± 100 pm (1520–1620 nm, 0.5–1.0 nm resolution); ± 300 pm (600–1520 nm)
Wavelength Linearity: ± 20 pm (1520–1620 nm)
Resolution Bandwidth: 0.03, 0.05, 0.07, 0.1, 0.2, 0.5, 1.0 nm; minimum 30 pm
Level Accuracy: ± 0.4 dB (1310/1550 nm, -10 dBm input, >0.1 nm resolution)
Level Linearity: ± 0.05 dB (1550 nm, -30 to $+20$ dBm, optical ATT off)
Polarization Dependency: ± 0.05 dB (1550/1600 nm)
Measurement Speed: <0.2 seconds (5 nm span)
Input Power Range: -90 to $+10$ dBm (1250–1600 nm); -85 to $+10$ dBm (1000–1250 nm, 1600–1650 nm); -65 to $+10$ dBm (600–1000 nm, 1650–1700 nm); -55 to $+10$ dBm (1700–1750 nm)

Key Features

- Single-screen display of optical metrics
- Dual dynamic range modes for flexibility in noise floor and signal separation
- Fine resolution down to 30 pm for narrow-linewidth source characterization
- High optical sensitivity to -90 dBm in critical C-band window

Typical Applications

- Optical transceiver and module validation
- Laser spectral purity and linewidth measurement
- WDM signal analysis and channel isolation verification
- OSNR and SMSR evaluation in optical systems

Compatibility & Integration

Integrates with Bit Error Rate Testers for joint spectral and signal-quality assessment of optical transceivers.

Features & description

From manufacturer datasheet

Features

- Diffraction-grating OSA, 600 to 1750 nm wavelength range
- Minimum resolution 30 pm
- Sensitivity to -90 dBm
- High dynamic range mode ≥ 60 dB; normal mode ≥ 58 dB at 0.4 nm from peak (0.05 nm resolution, 1550 nm)
- Fast sweep ≤ 0.2 s per 5 nm class
- Single-mode and multimode fiber support (Option 009)
- Windows operating system
- Compact benchtop form factor (< 15 kg, < 75 VA)

MS9740A Characteristics / Specifications

PARAMETER	VALUE
Model	MS9740A
Manufacturer	Anritsu
Instrument Type	Optical Spectrum Analyzer (diffraction-grating)
Wavelength Range	600 to 1750 nm
Minimum Resolution	30 pm
Sensitivity	−90 dBm
Dynamic Range (High Mode)	≥60 dB at 0.4 nm from peak (0.05 nm resolution, 1550 nm)
Dynamic Range (Normal Mode)	≥58 dB at 0.4 nm from peak (0.05 nm resolution, 1550 nm)
Sweep Speed	≤0.2 s per 5 nm class
Fiber Input	Single-mode and multimode (Option 009)
Operating System	Windows
Weight	<15 kg
Power Consumption	<75 VA
Related Model	MS9740B (distinct variant—do not confuse)
Alias	MS9740A Standard Operating Conditions Allow adequate warm-up per manufacturer guidance before precision wavelength and level measurements. Perform wavelength calibration as directed before quoting C-band accuracy. Operate within ambient temperature range specified on the instrument label.
Do not confuse MS9740A with MS9740B	the variants differ in specifications. Confirm installed options (Option 009 for MM fiber) before quoting fiber compatibility. Alias MS9740A.

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.

wavelength range

- Minimum resolution 30 pm
- Sensitivity to -90 dBm
- High dynamic range mode ≥60 dB; normal mode ≥58 dB at 0.4 nm from peak (0.05 nm resolution, 1550 nm)
- Fast sweep ≤0.2 s per 5 nm class
- Single-mode and multimode fiber support (Option 009)
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Sweep Speed	≤0.2 s per 5 nm class
Fiber Input	Single-mode and multimode (Option 009)
Operating System	Windows
Weight	<15 kg
Power Consumption	<75 VA
Related Model	MS9740B (distinct variant-do not confuse)
Alias	MS9740A

Standard Operating Conditions

Allow adequate warm-up per manufacturer guidance before precision wavelength and level measurements. Perform wavelength calibration as directed before quoting C-band accuracy. Operate within ambient temperature range specified on the instrument label.

Operational Notes

Do not confuse MS9740A with MS9740B-the variants differ in specifications. Confirm installed options (Option 009 for MM fiber) before quoting fiber compatibility. Alias MS9740A.

Ordering Information

OPTION	DESCRIPTION
Option 009	for MM fiber) before quoting fiber compatibility. Alias MS9740A.

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

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30-day returns
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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.