

**Aumictech**

Test & measurement • bought, sold, repaired, calibrated

Data Sheet

August 2, 2026

ANRITSU

Anritsu MS9001B1 – Optical Spectrum Analyzer

Anritsu MS9001B1 – Optical Spectrum Analyzer The MS9001B1 provides a multifunctional optical spectrum analyzer optimized for optical-communication wavelengths from 0.6 to 1.75 μm , with guaranteed level accuracy and a wider dynamic range than the MS9001B for DFB side-mode and stray-light measurements. 1.55 μm -band LD and DFB side-mode characterization; optical part and fiber loss measurement with white-light sources; LD/LED spectrum, fiber-loss, and filter-transmission analysis; high-speed sweep monitoring of spectral stability and mode hopping; GPIB-automated production and lab OSA test. The MS9001B1 provides a multifunctional optical spectrum analyzer optimized for optical-communication wavelengths from 0.6 to 1.75 μm , with guaranteed level accuracy and a wider dynamic range than the MS9001B for DFB side-mode and stray-light measurements. 1.55 μm -band LD and DFB side-mode characterization; optical part and fiber loss measurement with white-light sources; LD/LED spectrum, fiber-loss, and filter-transmission analysis; high-speed sweep monitoring of spectral stability and mode hopping; GPIB-automated production and lab OSA test.



MODEL

Anritsu MS9001B1

CALIBRATION

Available on request

CONDITION

Used

STATUS

In stock

RFQ / SKU

MS9001B1

LISTING

<https://aumictechlabs.com/products/ms9001b1-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Anritsu MS9001B1 is an optical spectrum analyzer engineered for precise characterization of optical signals across the near-infrared and visible spectrum. It delivers high-speed measurement with a 0.3-second sweep capability and dynamic range of 50 dB, making it suitable for research, quality assurance, and diagnostic applications in optical communication systems.

Technical Specifications

Wavelength Range: 600 nm to 1750 nm
Input Power Range: -70 dBm to +10 dBm
Power Accuracy: ± 2 dB
Dynamic Range: 50 dB
Resolution Bandwidth: 0.2 nm to 5 nm (single-mode fiber); 0.1 nm available at specific wavelengths (1523 nm and 1532 nm)
Linearity: 0.5 dB/20 dB and 1 dB/60 dB
Sweep Time: 0.3 seconds for 0 to 2 nm sweep width
Operating Temperature: 10°C to 40°C (15°C to 25°C for 0.1 nm and 0.2 nm resolution modes)

Key Features

Spectral analysis for laser diodes (LD) and light-emitting diodes (LED)
Fiber loss measurement and optical filter transmission characterization
Zero marker function displays spectral half-width, wavelength, and power level numerically
Averaging function for improved measurement stability
Diffraction grating design ensures polarization-insensitive operation, enabling stable measurements from polarized sources

Typical Applications

1.55 μm band light-emitting element characterization for long-distance optical communications
Loss characteristic measurement of optical components and materials using white-light sources
High-resolution spectral profiling for precision optical signal analysis
Laser and LED source diagnostics

Compatibility & Integration

Remote Interface: GPIB
Dimensions: 266 mm (H) $\times$ 426 mm (W) $\times$ 450 mm (D)
Weight: Less than 30 kg
Compatible with external white-light source modules such as the MG922A for broadband loss measurements

Features & description

From manufacturer datasheet

Features

- Optical spectrum analyzer, 0.6 to 1.75 μm (600 to 1750 nm) • Level range -70 to $+10$ dBm (0.7 to 1.6 μm class; wider at band edges per OEM) • Measuring level accuracy ≤ 2 dB at 0.85, 1.31, and 1.55 μm • Dynamic range (stray light): 50 dB class for MS9001B1 (vs 45 dB class for MS9001B) • Linearity ≤ 0.5 dB/20 dB; ≤ 1 dB/60 dB • Resolution bandwidth 0.1 to 5 nm • Wavelength readout resolution 2 pm • Analysis: LD/LED spectrum, fiber loss, filter transmission; peak search/center; half-width • High-speed sweep (0.3 s class for narrow sweep widths) • Built-in thermal printer; GPIB remote interface

Polarization Dependence: approximately ± 0.5 dB (at 1.31 / 1.55 μm)

Resolution Bandwidth: 0.1 to 5 nm Wavelength Readout Resolution: 2 pm Remote Interface: GPIB
Related Model: MS9001B (45 dB dynamic-range class—distinct) Alias: MS9001B1 Standard Operating Conditions Allow warm-up and perform wavelength calibration per Anritsu procedure. Select resolution bandwidth appropriate for DFB SMSR or LED spectral measurements. Use SM fiber at reference wavelengths when verifying level accuracy. Operational Notes MS9001B1 is the higher dynamic-range sibling of MS9001B—confirm faceplate B1 suffix. Prefer Anritsu MS9001B/B1 OEM sheet over third-party listings that inflate level range beyond -70 to $+10$ dBm. Alias MS9001B1.

MS9001B1 Characteristics / Specifications

PARAMETER	VALUE
Anritsu MS9001B	Optical Spectrum Analyzer Overview The MS9001B1 provides a multifunctional optical spectrum analyzer optimized for optical-communication wavelengths from 0.6 to 1.75 μm , with guaranteed level accuracy and a wider dynamic range than the MS9001B for DFB side-mode and stray-light measurements.
Model	MS9001B1
Manufacturer	Anritsu
Instrument Type	Optical Spectrum Analyzer
Wavelength Range	0.6 to 1.75 μm (600 to 1750 nm)
Level Measuring Range	-70 to +10 dBm (0.7 to 1.6 μm); -65 to +10 dBm (0.6 to 1.7 μm); -55 to +10 dBm (1.6 to 1.75 μm)
Level Accuracy	≤ 2 dB (at 0.85 / 1.31 / 1.55 μm)
Linearity	≤ 0.5 dB / 20 dB; ≤ 1 dB / 60 dB
Dynamic Range (MS9001B1)	approximately 50 dB class (peak to +1 nm / +5 nm conditions per OEM)
Polarization Dependence	approximately ± 0.5 dB (at 1.31 / 1.55 μm)
Resolution Bandwidth	0.1 to 5 nm
Wavelength Readout Resolution	2 pm
Remote Interface	GPIB
Related Model	MS9001B (45 dB dynamic-range class—distinct)
Alias	MS9001B1 Standard Operating Conditions Allow warm-up and perform wavelength calibration per Anritsu procedure. Select resolution bandwidth appropriate for DFB SMSR or LED spectral measurements. Use SM fiber at reference wavelengths when verifying level accuracy.
Dynamic range (stray light)	50 dB class for MS9001B1 (vs 45 dB class for MS9001B)
Analysis	LD/LED spectrum, fiber loss, filter transmission; peak search/center; half-width
Bandwidth	0.1 to 5 nm - Wavelength readout resolution 2 pm - Analysis: LD/LED spectrum, fiber loss, filter transmission; peak search/center; half-width - High-speed sweep (0.3 s class for narrow sweep widths) - Built-in thermal printer; GPIB remote interface

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	MS9001B1
Manufacturer	Anritsu
Instrument Type	Optical Spectrum Analyzer
Wavelength Range	0.6 to 1.75 μm (600 to 1750 nm)
Level Measuring Range	-70 to +10 dBm (0.7 to 1.6 μm); -65 to +10 dBm (0.6 to 1.7 μm); -55 to +10 dBm (1.6 to 1.75 μm)
Level Accuracy	≤ 2 dB (at 0.85 / 1.31 / 1.55 μm)
Linearity	≤ 0.5 dB / 20 dB; ≤ 1 dB / 60 dB
Dynamic Range (MS9001B1)	approximately 50 dB class (peak to +1 nm / +5 nm conditions per OEM)
Polarization Dependence	approximately ± 0.5 dB (at 1.31 / 1.55 μm)
Resolution Bandwidth	0.1 to 5 nm
Wavelength Readout Resolution	2 μm
Remote Interface	GPIB
Related Model	MS9001B (45 dB dynamic-range class-distinct)
Alias	MS9001B1
Standard Operating Conditions	
Allow warm-up and perform wavelength calibration per Anritsu procedure. Select resolution bandwidth appropriate for DFB SMSR or LED spectral measurements. Use SM fiber at reference wavelengths when verifying level accuracy.	
Operational Notes	
MS9001B1 is the higher dynamic-range sibling of MS9001B—confirm faceplate B1 suffix. Prefer Anritsu MS9001B/B1 OEM sheet over third-party listings that inflate level range beyond -70 to +10 dBm. Alias MS9001B1.	

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>

NIST-traceable calibration · SAM registered ·
30-day returns
NAICS 423690 · 811210 · 541380
Generated August 2, 2026

Technical content from manufacturer specifications. Unit photo/stock from Aumictech listing when available. Specifications subject to OEM documentation and unit condition.