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Data Sheet

August 14, 2026

ADVANTEST

Advantest Q8347 350nm-1750nm Optical Spectrum Analyzer

Advantest Q8347 Optical Spectrum Analyzer 350 nm to 1750 nm The Advantest Q8347 isaMichelson interferometer Fourier optical spectrum analyzer covering 0.35 to 1.75 μm . OEM-oriented specification summaries list 0.01 nm resolution and plus or minus 0.01 nm accuracy at 1.55 μm , about 0.001 nm resolution at 0.5 μm , level range minus 72 to plus 10 dBm in the 1.2 to 1.6 μm band, and 35 dB dynamic range with 16 averages on a 1 nm filter. WDM channel separation, narrow-band filter characterization, LD chirp/coherence, and blue LD analysis at 500 nm. The Advantest Q8347 isaMichelson interferometer Fourier optical spectrum analyzer covering 0.35 to 1.75 μm . OEM-oriented specification summaries list 0.01 nm resolution and plus or minus 0.01 nm accuracy at 1.55 μm , about 0.001 nm resolution at 0.5 μm , level range minus 72 to plus 10 dBm in the 1.2 to 1.6 μm band, and 35 dB dynamic range with 16 averages on a 1 nm filter. WDM channel separation, narrow-band filter characterization, LD chirp/coherence, and blue LD analysis at 500 nm. Coherence analysis to plus or minus 165 mm



MODEL

Advantest Q8347

CALIBRATION

Available on request

CONDITION

Used

STATUS

In stock

RFQ / SKU

Q8347

LISTING

<https://aumictechlabs.com/products/q8347-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Advantest Q8347 is a Michelson interferometer-based optical spectrum analyzer engineered for high-resolution spectral characterization across 350 nm to 1750 nm. It delivers wavelength

accuracy to ± 0.01 nm in high-resolution mode and dynamic range exceeding 35 dB, making it suitable for precise evaluation of light sources, passive optical components, WDM transmission systems, and ultra-high-speed optical channels. Measurement speeds reach 1 second in normal mode and 2.5–3.5 seconds in high-resolution configurations. The instrument provides multiple analysis modes including curve fitting (sech² and Gaussian), trend monitoring, spectral-width calculation, and 3-D display.

Technical Specifications

Wavelength Range: 350 nm to 1750 nm
Measurement Range: -72 dBm to +10 dBm (1.2–1.6 μ m); -65 dBm to +10 dBm (0.7–1.6 μ m); -52 dBm to +10 dBm (0.45–1.7 μ m); -42 dBm to +10 dBm (0.35–1.75 μ m)
High-Resolution Mode: 0.001 nm @ 500 nm, 0.003 nm @ 0.85 μ m, 0.007 nm @ 1550 nm, 1 GHz optical frequency mode
Normal Mode: 0.1 nm @ 1.55 μ m, 0.05 nm @ 0.85 μ m
Wavelength Accuracy: ± 0.01 nm (high-resolution), ± 0.1 nm (normal)
Level Accuracy: ± 1.0 dB @ 780 nm; ± 0.7 dB @ 1310/1550 nm (-10 dBm input)
Linearity: ± 0.1 dB/-20 dB; ± 0.5 dB/-30 dB
Dynamic Range: ≥ 35 dB
Measurement Time: 1 second (normal), 2.5 seconds (high-resolution, 0.95–1.75 μ m), 3.5 seconds (high-resolution, 0.35–1.05 μ m)
Span: 0.01 nm/DIV to 140 nm/DIV
Coherence Analysis Range: ± 165 mm maximum Power Requirements: AC 100–120 V / 220–240 V, 48–66 Hz
Power Consumption: 180 VA (main unit), 80 VA (optical unit)
Dimensions: Main unit 424 (W) $\times$ 221 (H) $\times$ 500 (D) mm

Key Features

- Built-in high-speed thermal printer (8 seconds or less)
- Floppy disk storage (720 KB / 1.2 MB, MS-DOS format)
- GPIB interface for control and data output
- Automatic peak search and normalization (loss/transmission)
- MAX/MIN hold, super impose, and trend monitoring (power, wavelength)
- User-selectable smoothing and averaging
- Color display customization with cursor function

Typical Applications

- WDM transmission system characterization
- Narrow-band optical filter evaluation
- Research and development spectral analysis
- Quality control of optical sources and components

Compatibility & Integration

GPIB interface enables remote control and automated data acquisition. Text-format data output supports direct integration with external processing systems and PC-based analysis workflows.

Q8347 Characteristics / Specifications

PARAMETER	VALUE
Model	Q8347
Instrument Type	Michelson interferometer Fourier OSA
Wavelength Range	0.35 μm to 1.75 μm
Resolution High Mode 1.55 μm	approx 0.01 nm
Resolution High Mode 0.85 μm	approx 0.003 nm
Resolution 0.5 μm Band	0.001 nm
Optical Frequency Resolution	1 GHz at 1.55 μm
Wavelength Accuracy High Mode	plus or minus 0.01 nm or less
Optical Frequency Accuracy	plus or minus 1 GHz
Wavelength Span	0.01 nm per DIV to 140 nm per DIV
Level Range 1.2 to 1.6 μm	minus 72 to plus 10 dBm
Level Range Full Band	minus 42 to plus 10 dBm 0.35 to 1.75 μm
Level Accuracy 780 nm	plus or minus 1.0 dB at minus 10 dBm
Level Accuracy 1310 nm	plus or minus 0.7 dB at minus 10 dBm
Level Accuracy 1550 nm	plus or minus 0.7 dB at minus 10 dBm
Measurement Time	1 second or less
Dynamic Range Filter 1 nm Avg	35 dB
Linearity 30 dB Down	plus or minus 0.5 dB or less
Coherence Analysis Range	plus or minus 165 mm
Wavelength Display	vacuum wavelength
Alternate Display	optical frequency GHz
Storage Temperature	minus 10 to plus 50 C 90 percent RH or less
WDM Channel Example	0.1 nm spacing about 10 GHz at 1550 nm

Q8347 Specifications

PARAMETER	VALUE
Applications	WDM channel separation, narrow-band filter characterization, LD chirp/coherence, and blue LD analysis at 500 nm.
Key Features	Michelson Fourier OSA 350 to 1750 nm
Coherence analysis to plus or minus 165 mm	Optical frequency display in GHz
Technical Specifications	Model: Q8347

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
Storage temperature	minus 10 to plus 50 C 90 percent RH or less
WDM Channel Example	0.1 nm spacing about 10 GHz at 1550 nm Notes From Advantest Q8347 Optical Spectrum Analyzer specification summaries republished on calibration and product sheets that copy the OEM table. Confirm interferometer alignment and level calibration on the installed unit.

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	Q8347
Instrument Type	Michelson interferometer Fourier OSA
Wavelength Range	0.35 um to 1.75 um
Resolution High Mode 1.55 um	approx 0.01 nm
Resolution High Mode 0.85 um	approx 0.003 nm
Resolution 0.5 um Band	0.001 nm
Optical Frequency Resolution	1 GHz at 1.55 um
Wavelength Accuracy High Mode	plus or minus 0.01 nm or less
Optical Frequency Accuracy	plus or minus 1 GHz
Wavelength Span	0.01 nm per DIV to 140 nm per DIV
Level Range 1.2 to 1.6 um	minus 72 to plus 10 dBm
Level Range Full Band	minus 42 to plus 10 dBm 0.35 to 1.75 um
Level Accuracy 780 nm	plus or minus 1.0 dB at minus 10 dBm
Level Accuracy 1310 nm	plus or minus 0.7 dB at minus 10 dBm
Level Accuracy 1550 nm	plus or minus 0.7 dB at minus 10 dBm
Measurement Time	1 second or less
Dynamic Range Filter 1 nm Avg 16	35 dB
Linearity 30 dB Down	plus or minus 0.5 dB or less
Coherence Analysis Range	plus or minus 165 mm
Wavelength Display	vacuum wavelength
Alternate Display	optical frequency GHz
Storage Temperature	minus 10 to plus 50 C 90 percent RH or less
WDM Channel Example	0.1 nm spacing about 10 GHz at 1550 nm
Notes	
From Advantest Q8347 Optical Spectrum Analyzer specification summaries republished on calibration and product sheets that copy the OEM table. Confirm interferometer alignment and level calibration on the installed unit.	

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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NIST-traceable calibration · SAM registered ·
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.