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Data Sheet

August 2, 2026

ADVANTEST

Advantest TQ8325 Digital Optical Wavelength Meter / UPDATED CALIBRATION

Advantest TQ8325 Digital Optical Wavelength Meter / UPDATED CALIBRATION The TQ8325 provides a Michelson interferometer-based digital optical wavelength meter designed for approximately 0.48 to 1.6 μm coverage with 0.01 nm resolution and approximately 5 ppm accuracy class referenced to an internal He-Ne laser. The instrument includes frequency deviation display, alignment level meter, averaging mode, and GPIB remote interface. Laser and LED wavelength verification; WDM channel wavelength measurement; optical source calibration and drift monitoring; fiber alignment using built-in level meter; production test of tunable and fixed-wavelength transmitters; R&D characterization across short (approximately 0.6 to 1.0 μm) and long (approximately 1.0 to 1.6 μm) bands. The TQ8325 provides a Michelson interferometer-based digital optical wavelength meter designed for approximately 0.48 to 1.6 μm coverage with 0.01 nm resolution and approximately 5 ppm accuracy class referenced to an internal He-Ne laser. The instrument includes frequency deviation display, alignment level meter, averaging mode, and GPIB remote interface. Laser and LED wavelength verification; WDM channel wavelength measurement; optical source calibration and drift monitoring; fiber alignment using built-in level meter; production test of tunable and fixed-wavelength transmitters; R&D characterization across short (approximat



MODEL	CALIBRATION
Advantest TQ8325	Available on request
CONDITION	STATUS
Used	In stock
RFQ / SKU	LISTING
TQ8325	https://aumictechlabs.com/products/tq8325-2/

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Advantest TQ8325 Digital Optical Wavelength Meter is a precision benchtop instrument for high-accuracy measurement of optical signal wavelengths across visible to near-infrared bands. Built around a He-Ne laser standard, it employs Michelson interferometry to characterize central emitted wavelengths from laser diodes, LEDs, and modulated optical sources. The meter delivers wavelength and frequency readout simultaneously, with a dedicated deviation measurement function to track wavelength drift relative to a stored reference. Auto-resolution automatically optimizes measurement resolution based on the half-value width of the input signal, while AVG mode averages 10 consecutive measurements for noise reduction.

Technical Specifications

Measurement Range & Accuracy Wavelength Range: 480 nm to 1000 nm (short band); 1000 nm to 1600 nm (long band) Measurement Accuracy: 5 ppm Wavelength Resolution: 0.001 nm Frequency Resolution: 100 MHz Sampling Rate: 5 times/second Measurement Time: 200 ms Optical Input Connector: FC type Input Fiber: 9/125 μ m single-mode Maximum Input Level: -15 dBm to +3 dBm (480–1000 nm); -23 dBm to +3 dBm (1000–1600 nm) Signal Capabilities Intensity-modulated light measurement at modulation rates ≥ 3 MHz Wavelength and frequency display modes Deviation measurement against reference wavelength Interfaces & Output GPIB interface Analog output: 0 to +1 V (lowest 3 digits) 7-segment LED display Physical & Environmental Dimensions: 300 mm (W) $\times$ 132 mm (H) $\times$ 450 mm (D) Mass: ≤ 12 kg Operating Temperature: 0°C to +40°C Operating Humidity: $\leq 85\%$ RH

Key Features He-Ne laser standard ensures long-term measurement stability Michelson interferometry method enables sub-nanometer resolution Auto-resolution adapts to input signal characteristics Moving-average mode suppresses measurement noise Dual wavelength and frequency display for system flexibility FC connector accommodates standard single-mode fiber

Typical Applications Optical transceiver and module characterization Laser diode wavelength verification and stability monitoring LED spectral analysis in communications systems Wavelength drift detection under thermal stress Modulated signal source characterization

Compatibility & Integration GPIB connectivity enables automated test sequences and remote instrument control. Analog output allows real-time wavelength trending on external data acquisition hardware.

Features & description

From manufacturer datasheet

Features

- Michelson interferometer wavelength meter
- He-Ne laser reference
- Wavelength range approximately 0.48 to 1.6 μm
- Short band approximately 0.6 to 1.0 μm ; long band approximately 1.0 to 1.6 μm
- Resolution 0.01 nm
- Accuracy approximately 5 ppm class
- Frequency deviation display
- Level meter for optical alignment
- AVG averaging mode
- GPIB remote interface

TQ8325 Characteristics / Specifications

PARAMETER	VALUE
Model	TQ8325
Manufacturer	Advantest
Instrument Type	Digital Optical Wavelength Meter
Principle	Michelson interferometer with He-Ne reference
Wavelength Range	Approximately 0.48 to 1.6 μm
Short Band	Approximately 0.6 to 1.0 μm
Long Band	Approximately 1.0 to 1.6 μm
Resolution	0.01 nm
Accuracy	Approximately 5 ppm class
Displays	Wavelength and frequency deviation
Alignment Aid	Optical level meter
Averaging	AVG mode
Remote Interface	GPIB
Alias	TQ8325 Standard Operating Conditions Select correct wavelength band for target source. Use level meter for input alignment before measurement. Allow He-Ne reference and interferometer path to stabilize at operating temperature. Use averaging mode for noisy or drifting sources.

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	TQ8325
Manufacturer	Advantest
Instrument Type	Digital Optical Wavelength Meter
Principle	Michelson interferometer with He-Ne reference
Wavelength Range	Approximately 0.48 to 1.6 μm
Short Band	Approximately 0.6 to 1.0 μm
Long Band	Approximately 1.0 to 1.6 μm
Resolution	0.01 nm
Accuracy	Approximately 5 ppm class
Displays	Wavelength and frequency deviation
Alignment Aid	Optical level meter
Averaging	AVG mode
Remote Interface	GPIB
Alias	TQ8325

Standard Operating Conditions

Select correct wavelength band for target source. Use level meter for input alignment before measurement. Allow He-Ne reference and interferometer path to stabilize at operating temperature. Use averaging mode for noisy or drifting sources.

Operational Notes

Catalog listing "UPDATED CALIBRATION" indicates inventory calibration status-notaseparate instrument model. Verify calibration due date and certificate when purchasing from secondary market. Alias TQ8325.

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