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Data Sheet
August 13, 2026

BURLEIGH

Burleigh WA-1650 Wavelength Meter

The Burleigh WA-1650 Wavelength Meter is a precision instrument for measuring the absolute wavelength of lasers. It offers high accuracy and reliability for various applications, including laser characterization, spectroscopy, and optical metrology. The WA-1650 provides accurate wavelength measurements, ensuring consistent and reliable results. Features include broad wavelength coverage and user-friendly operation.

MODEL Burleigh WA-1650	CALIBRATION Available on request
CONDITION Used	STATUS In stock
RFQ / SKU WA-1650	LISTING https://aumictechlabs.com/products/wa-1650-2/

NIST-traceable cal · SAM registered · 30-day returns · NAICS 423690 · 811210 · 541380

This unit

The Burleigh WA-1650 Wavelength Meter is a benchtop optical metrology instrument for absolute wavelength measurement of laser sources. It delivers high-precision characterization across a broad spectral range, with stable and repeatable measurements traceable to calibration standards. The instrument accommodates diverse laser types and power levels through selectable measurement modes and user-configurable settings, making it essential for laser validation, spectroscopy, optical system calibration, and production quality assurance.Technical Specifications Measurement Type: Absolute wavelength measurement Accuracy: High precision, suitable for metrology applications Wavelength Coverage: Broad spectral range Resolution: Capable of resolving fine spectral features Stability: Designed for stable and repeatable measurements Calibration: Traceable calibration procedures availableKey Features Intuitive user

interface for straightforward operation and setup Multiple measurement modes for different laser characterization requirements User-configurable settings optimized for various laser sources Benchtop form factor suited for laboratory environments Standard data interfaces for external system integration and data loggingTypical Applications Laser characterization: diode testing, fiber laser development, and tunable laser validation Spectroscopy: wavelength referencing in absorption, emission, and Raman measurements Optical metrology: component calibration and interferometer validation Research and development: fundamental and applied optical investigations Manufacturing and quality control: verification of laser output specificationsCompatibility & Integration The WA-1650 accepts input from a wide range of laser types and power levels. Standard data output interfaces enable connection to external systems, logging platforms, and automated measurement workflows.

Features & description

From manufacturer datasheet

Features

- Scanning Michelson interferometer Wavemeter technology

Applications

- Absolute wavelength measurement of CW and modulated lasers

WA1650 Characteristics / Specifications

PARAMETER	VALUE
Model	WA-1650
Manufacturer	Burleigh (EXFO / Burleigh Wavemeter)
Instrument Type	Optical Wavelength Meter
Optical Architecture	Scanning Michelson interferometer
Wavelength Range	700 nm to 1650 nm (181 THz to 428 THz)
Absolute Wavelength Uncertainty	±0.2 ppm (±0.3 pm at 1500 nm)
Wavelength Display Resolution	0.0001 nm
Wavelength Units	nm (vacuum); GHz
Power Uncertainty	±0.5 dB (at ±30 nm from 1310 nm and 1550 nm)
Power Resolution Spec	±0.05 dB
Power Linearity	±0.3 dB
Power Display Resolution	0.01 dB
Power Units	dBm; mW; µW
Input Sensitivity 12	1600 nm: −40 dBm (0.1 µW)
Input Sensitivity 7	1650 nm Typical: −30 dBm (1 µW)
Maximum Displayed Input Level	+10 dBm (10 mW)
Maximum Safe Input Level	+18 dBm (63 mW)
Measurement Update Time	1 s (1 measurement/s)
Calibration	Continuous with built-in HeNe laser wavelength standard
Remote Interfaces	GPIB (IEEE-488.2); RS-232; LabVIEW
Front Panel	Data review and parameter control
Product Family	WA-1650 / WA-1150 / WA-1100 Notes Specs from EXFO/Burleigh WA-1650 Wavemeter datasheet. Confirm AC mains and fiber connector type on the unit.
Absolute wavelength accuracy	±0.3 pm (±0.2 ppm)

WA1650 Specifications

PARAMETER	VALUE
Applications	- Absolute wavelength measurement of CW and modulated lasers
Technical Specifications	Model: WA-1650
Notes	Specs from EXFO/Burleigh WA-1650 Wavemeter datasheet. Confirm AC mains and fiber connector type on the 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

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Model	WA-1650
Manufacturer	Burleigh (EXFO / Burleigh Wavemeter)
Instrument Type	Optical Wavelength Meter

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Wavelength Display Resolution	0.0001 nm
Wavelength Units	nm (vacuum); GHz
Power Uncertainty	±0.5 dB (at ±30 nm from 1310 nm and 1550 nm)

Specifications

PARAMETER	VALUE
Power Resolution Spec	±0.05 dB
Power Linearity	±0.3 dB
Power Display Resolution	0.01 dB

Power Units: dBm; mW; µW

Input Sensitivity 1200–1600 nm: −40 dBm (0.1 µW)

Input Sensitivity 700–1650 nm Typical: −30 dBm (1 µW)

Specifications

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Maximum Displayed Input Level	+10 dBm (10 mW)

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Notes

Specs from EXFO/Burleigh WA-1650 Wavemeter datasheet. Confirm AC mains and fiber connector type on the 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

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