

**Aumictech**

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Data Sheet

August 2, 2026

BURLEIGH

Burleigh WA-2500 VIS/NIR/IR Wavemeter

The WA2500 provides a Wavemeter Jr-class laser wavelength measurement instrument designed for continuous-wave lasers from 400 to 1800 nm with high absolute accuracy, fast update rate, and VIS/NIR/IR detector coverage for laboratory and production wavelength verification. CW laser wavelength verification in VIS, NIR, and IR bands; tunable laser calibration and monitoring; spectroscopy and metrology lab wavelength reference; production test of laser modules and optical sources; remote wavelength readout via RS-232 for automated test systems. Instrument Type: VIS/NIR/IR Laser Wavemeter (Wavemeter Jr) Absolute Accuracy: ± 1 part in 10,000 (0.1 nm at 1000 nm) Provide minimum input power of approximately 20 μ W for reliable measurement. Select appropriate VIS or IR detector path for target wavelength band. Allow brief settling when switching between auto-resolution and averaging modes. Burleigh WA-2500 Wavemeter Jr covers 400 to 1800 nm CW sources with part-per-10,000 absolute accuracy class. Confirm detector path selection for wavelengths overlapping VIS (400–1100 nm) and IR (600–1800 nm) ranges. Alias WA2500.



MODEL

Burleigh WA-2500

CALIBRATION

Available on request

CONDITION

Used

STATUS

In stock

RFQ / SKU

WA-2500

LISTING

<https://aumictechlabs.com/products/wa-2500-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Burleigh WA-2500 VIS/NIR/IR Wavemeter is a precision instrument for accurate wavelength measurement of continuous-wave laser sources across the visible, near-infrared, and infrared

spectral regions. Built around a compact scanning Michelson interferometer and high-resolution Moiré gauge, it delivers ± 1 part in 10,000 accuracy with interchangeable detectors for broad spectral coverage. The wavemeter measures tunable lasers including dye, Ti:Sapphire, and diode lasers with coherence lengths down to 150 GHz linewidth and extends to 3000 GHz with Auto-Resolution adjustment.

Technical Specifications
Wavelength Range: 400 nm to 1800 nm
Accuracy: ± 1 part in 10,000 (0.1 nm or 1 cm^{-1} at 1000 nm)
Display Resolution: 0.01 nm (0.1 cm^{-1})
VIS Detector: 400 nm to 1100 nm
IR Detector: 600 nm to 1800 nm
Laser Linewidth Measurement: 150 GHz (5 cm^{-1}) at specified accuracy; Auto-Resolution up to 3000 GHz
Minimum Input Power: 20 μW
Maximum Incident Power: 100 mW on beam receiver (2.5 mm aperture); power density adjustment required for smaller beams
AC Power Input: 100/115/230 V AC
Key Features
Normal measurement mode updates every 0.2 seconds; Average mode accumulates 10 sequential measurements with 2-second display updates
Six-digit LED display with selectable units (nm or cm^{-1}) in vacuum or air
Bar-graph intensity meter for fringe signal monitoring and alignment
Signal condition indicators: "LO SIG" or "HI SIG" warnings
"COH Er" display flag indicates linewidth exceeding 3000 GHz
On-board calibration function
Beam receiver with 2.5 mm coupling head aperture and 3-meter patch cord cable

Typical Applications
Tunable laser wavelength verification and characterization
Dye laser output measurement
Ti:Sapphire laser wavelength determination
Diode laser spectral monitoring

Compatibility & Integration
RS-232 interface at 2400 Baud
Three BNC diagnostic outputs: MONITOR, WINDOW, and TRIGGER
Physical dimensions: 24 × 16 × 12 inches; Weight: 25 lbs

Features & description

From manufacturer datasheet

Features

- Wavemeter Jr instrument for CW laser wavelength measurement
- Wavelength range 400 to 1800 nm
- Absolute accuracy ± 1 part in 10,000 (0.1 nm at 1000 nm)
- Display resolution 0.01 nm
- VIS detector coverage 400 to 1100 nm
- IR detector coverage 600 to 1800 nm
- Update rate 0.2 s; averaging mode 2 s
- Minimum input power approximately 20 μW
- RS-232 interface at 2400 baud
- Auto-resolution mode

WA2500 Characteristics / Specifications

PARAMETER	VALUE
Model	WA-2500 (WA2500)
Manufacturer	Burleigh
Instrument Type	VIS/NIR/IR Laser Wavemeter (Wavemeter Jr)
Laser Type	CW
Wavelength Range	400 to 1800 nm
Absolute Accuracy	±1 part in 10,000 (0.1 nm at 1000 nm)
Display Resolution	0.01 nm
VIS Detector Range	400 to 1100 nm
IR Detector Range	600 to 1800 nm
Update Rate	0.2 s
Averaging Update	2 s
Minimum Input Power	~20 µW
Remote Interface	RS-232, 2400 baud
Resolution Mode	Auto-resolution
Alias	WA2500 Standard Operating Conditions Provide minimum input power of approximately 20 µW for reliable measurement. Select appropriate VIS or IR detector path for target wavelength band. Allow brief settling when switching between auto-resolution and averaging modes.

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	WA-2500 (WA2500)
Manufacturer	Burleigh
Instrument Type	VIS/NIR/IR Laser Wavemeter (Wavemeter Jr)
Laser Type	CW
Wavelength Range	400 to 1800 nm
Absolute Accuracy	±1 part in 10,000 (0.1 nm at 1000 nm)
Display Resolution	0.01 nm
VIS Detector Range	400 to 1100 nm
IR Detector Range	600 to 1800 nm
Update Rate	0.2 s
Averaging Update	2 s
Minimum Input Power	~20 µW
Remote Interface	RS-232, 2400 baud
Resolution Mode	Auto-resolution
Alias	WA2500
Standard Operating Conditions	
Provide minimum input power of approximately 20 µW for reliable measurement. Select appropriate VIS or IR detector path for target wavelength band. Allow brief settling when switching between auto-resolution and averaging modes.	
Operational Notes	
Burleigh WA-2500 Wavemeter Jr covers 400 to 1800 nm CW sources with part-per-10,000 absolute accuracy class. Confirm detector path selection for wavelengths overlapping VIS (400–1100 nm) and IR (600–1800 nm) ranges. Alias WA2500.	

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>

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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.