

WaveMate

Wavelength Meter

POWER & ENERGY

Power & Energy Meters

Power Sensors

Energy Sensors

Power & Energy Accessories

Custom & OEM

Calibration & Service

BEAM DIAGNOSTICS & SPECTRAL ANALYSIS

Beam Diagnostics

Spectral Analysis

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- *Fast, cost-effective wavelength measurements*
- *CW and pulsed lasers*
- *High sensitivity: 20 μ W CW, 10 μ J pulsed*
- *Excellent for diode lasers*

WaveMate™ offers a low-cost, compact solution for wavelength measurements of pulsed and CW laser sources from 450 nm to 1,000 nm. WaveMate can be set up quickly and easily with no special optical interface. It is ideally suited for monitoring the wavelength of tunable lasers and the stability of diode lasers. WaveMate can measure wavelengths to 0.1 nm (0.01 nm, HiRes option) from CW (± 0.5 nm accuracy) to single shot (± 1.0 nm accuracy). Measurements are shown on a bright, 8-digit display, along with the intensity readout and analog bar graph to insure optimum sensor signal level.

WaveMate's microprocessor-control unit provides menu-selectable functions, including measurement averaging, single pulse sample-and-hold, Δ wavelength difference display mode, signal integration, and background zero offset calibration. All functions can be set for fully automatic operation to provide maximum ease of use and accuracy.



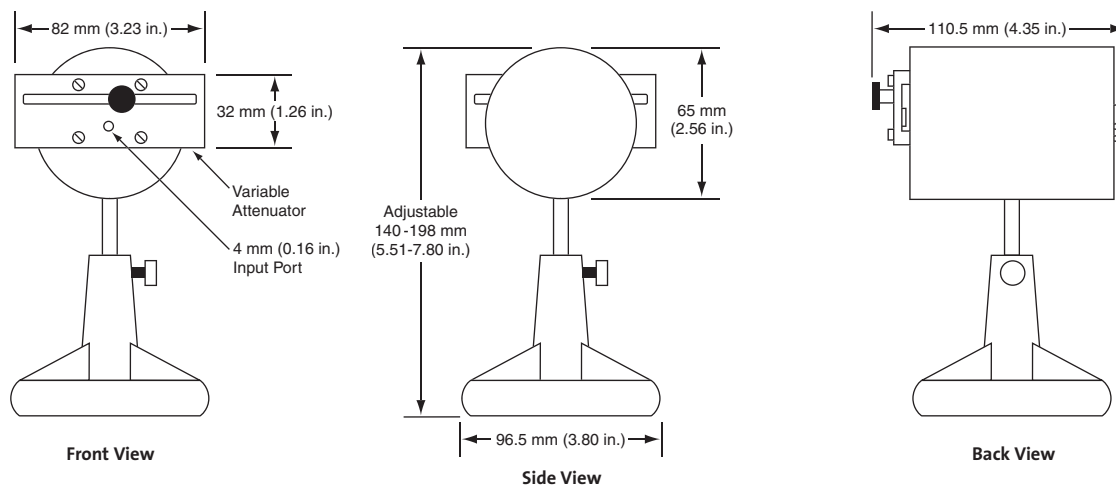
WaveMate's unique detector head design incorporates a temperature-stabilized, dual-wavelength response sensor element with built-in variable attenuator; AutoBlock™ background reference shutter, and a background-limiting, alignment-insensitive, 4 mm beam input port. WaveMate is calibrated at 13 specific wavelength points to insure accuracy of the sensor wavelength response.

WaveMate comes standard with an RS-232 serial port, a cable and interface software. Standard 1/4-20 and 6 mm tapped holes and a post and stand are provided. For non-pulsed measurement applications, an economical CW-only version of the WaveMate is available.

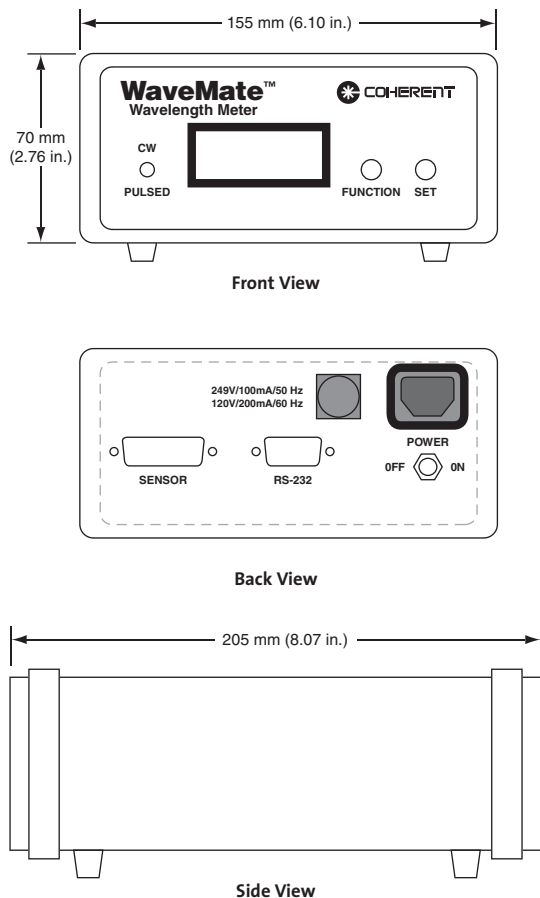


WaveMate

SENSOR HEAD



WAVEMATE



Specifications

WaveMate

Wavelength Range	450 nm to 1,000 nm
Input Port Diameter	4 mm
Accuracy	±0.5 nm (CW); ±1.0 nm (pulsed)
Resolution	0.1 nm (0.01 nm with HiRes option)
Sensitivity	20 μW (CW @ 633 nm); 10 μJ (pulsed)
Dynamic Range	1000:1 with variable attenuator provided
Damage Threshold (attenuator)	75 W/cm ² ; 10 mJ/cm ²
CW Operation	CW or lasers modulated @ >5 kHz
Warm-up Time	15 minutes
Pulsed Operation	Single shot to <10 kHz; fully automatic triggering (pulse widths >100 fsec.)
Interface	RS-232 serial port (wavelength out)
Power Supply	120V/60 Hz, 240V/50 Hz, rear panel selectable, fused 200/100 mA
Weight	Sensor head, 0.56 kg; control unit, 1.41 kg
Mounting Post	0.25 in. 1/4-20 (6 mm thread also incl.)
Operating Temp.	15°C to 30°C
Dimensions	
Control Console	155 x 70 x 205 mm
Sensor Head	65 mm dia. x 111 mm, with 32 mm x 82 mm attenuator block (pulsed option only)
Analog Output	4.5-10.0V, calibrated proportional to wavelength (analog option only)
Part Number	
33-2668-000	WaveMate-P (Pulsed and CW)
33-2676-000	WaveMate-C (CW-only)
33-2684-000	WaveMate-P (w/HiRes special order option*)
33-2692-000	WaveMate-C (w/analog special order option)

* Enhanced resolution in CW mode only.



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