

LW-10 Wavemeter

Compact High-Resolution Laser Wavelength Meter

LW-10 provides a very robust calibration with 20 MHz resolution and 200 MHz absolute accuracy within a very compact package.

The instrument is suitable for CW and pulsed lasers.

SPECIFICATIONS

Wavelength range ⁽¹⁾	700 - 1000 nm
Wavelength resolution	20 MHz
Absolute accuracy ^{(2) (3) (4)}	200 MHz
Maximum linewidth	30 GHz
Measurement speed ⁽⁵⁾	> 20 Hz
Input power range ⁽⁶⁾	0.010 - 1000 μ W
Optical input	PM singlemode fiber N.A. 0.12
Fiber connection	FC/APC
Power consumption	11 W - 450 mA @ 24 VDC
Communication	Gigabit Ethernet + USB 2.0
Dimensions	149 x 86 x 80 mm
Weight	1 kg

FUNCTIONALITIES with SpectraResolver software

Compatibility	Windows 7, 8
Unit change	nm (vacuum and standard air) / cm^{-1} / THz
Software development kit	C/C++, Python, DotNet, VIs libraries
Trigger	Front Trigger and Pulsed Width Trigger

⁽¹⁾ 630-1100 nm as an option.

⁽²⁾ T¹ calibrated on 16-30°C. For quality check, an absolute accuracy calibration procedure is available with SpectraResolver. Not frequently required.

⁽³⁾ Warm-up: best performances are achieved when very stable thermal conditions are reached, typically ambient temperature stable at +/- 0.5°C per hour maximum, constant air flow, LW-10 running for more than 30 minutes. No sensitivity to air pressure variation.

⁽⁴⁾ According to 3 σ criterion.

⁽⁵⁾ Speed of calculation. Depending on PC hardware and settings.

⁽⁶⁾ Coupled in PM singlemode fiber.



Key features

- 20 MHz resolution
- 200 MHz absolute accuracy
- For pulsed and CW lasers
- User-friendly software
- Compact size

Applications

- Tunable laser control
- Frequency locking
- Frequency mixing

Available options

- Multi-channel
- Laser control PID
- Laser spectrum analyzer function

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