

# 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 <sup>(1)</sup>	700 - 1000 nm
Wavelength resolution	20 MHz
Absolute accuracy <sup>(2) (3) (4)</sup>	200 MHz
Maximum linewidth	30 GHz
Measurement speed <sup>(5)</sup>	> 20 Hz
Input power range <sup>(6)</sup>	0.010 - 1000 $\mu$ 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) / $\text{cm}^{-1}$ / THz
Software development kit	C/C++, Python, DotNet, VIs libraries
Trigger	Front Trigger and Pulsed Width Trigger

<sup>(1)</sup> 630-1100 nm as an option.

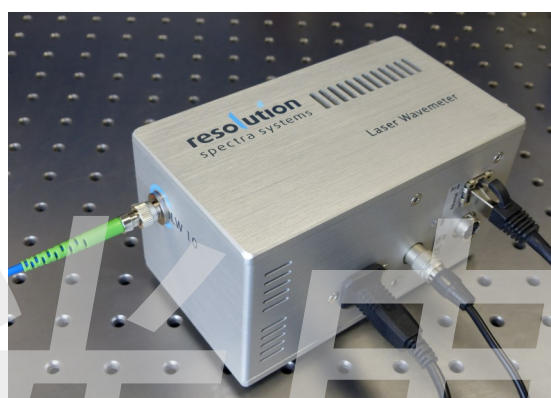
<sup>(2)</sup> T<sup>1</sup> calibrated on 16-30°C. For quality check, an absolute accuracy calibration procedure is available with SpectraResolver. Not frequently required.

<sup>(3)</sup> 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.

<sup>(4)</sup> According to 3 $\sigma$  criterion.

<sup>(5)</sup> Speed of calculation. Depending on PC hardware and settings.

<sup>(6)</sup> 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