

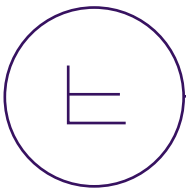
# LASER

SWEPT, TUNABLE,  
CONTINUOUS WAVE (CW)  
LASER SOURCE

SPECIFICATION SHEET

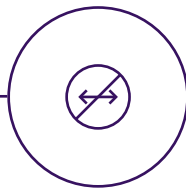
EPIQ-Laser uses a high quality grating paired with state-of-the-art micro-electromechanics tuning mechanism for quick, voltage-controlled wavelength tuning and exceptional reliability.

With 0.01 dB power stability and 400 nm/s high-speed scan rate, it is the perfect time-saving tool for R&D applications as well as production testing.



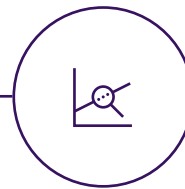
### High power stability

Highly stable output power ensures accurate and consistent test and measurement results.



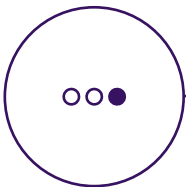
### No moving bulk optics

State-of-the-art MEMS technology and no moving bulk optics offer reliable wavelength tuning.



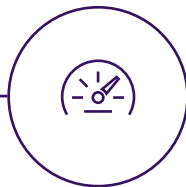
### Fine tuning resolution

Set the exact wavelength you need with epiQ-Laser's precision micro-electromechanics tuning.



### Trigger at the start of each scan

The trigger output from the laser allows synchronization to the start and stop of each wavelength sweep



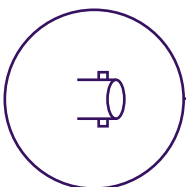
### Fast sweep speed

Save time on your DUT characterization or speed up your measurement with epiQ-Laser's rapid sweep speed.



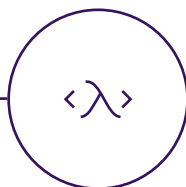
### Swept or step-tuning modes

Intuitive software GUI makes it simple to configure the epiQ-Laser in fixed, continuous or step tuning modes



### Analog power output

Provides a real-time reference of the laser's power output for an easy integration into automated test set-ups.



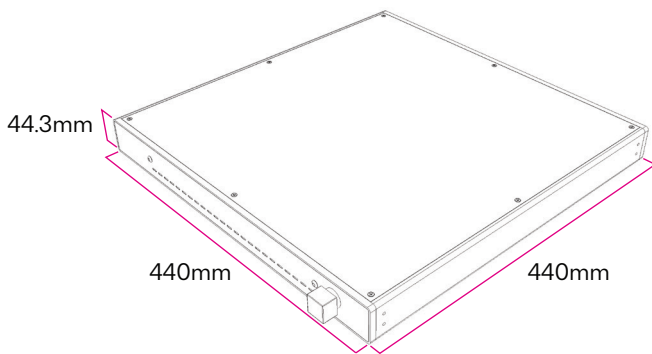
### Wide coverage of wavelength options

Choose from a wide range of operating wavelength ranges to suit your specific application.

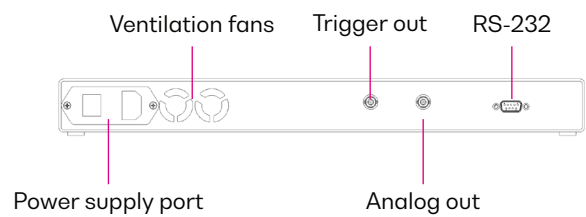


EPIQ-LASER-1001

### Instrument dimensions



### Rear panel connections



### TARGET APPLICATIONS

- Optical component characterization
- High density fiber-optic sensor interrogation
- Biomedical imaging applications

## EPIQ LASER TECHNICAL SPECIFICATIONS

General Specifications	1001	1002	1003
Operating wavelength range <sup>1</sup>	1260 to 1340 nm	1260 to 1420 nm	1520 to 1580 nm
Output power (one port)	≥ 5 mW	≥ 2 mW	≥ 10 mW
Power stability <sup>2</sup>	± 0.01 dB	± 0.01 dB	± 0.01 dB
Power repeatability <sup>3</sup>	≤ ± 0.05 dB	≤ ± 0.05 dB	≤ ± 0.05 dB
Wavelength stability <sup>2</sup>	≤ ± 10 pm	≤ ± 10 pm	≤ ± 10 pm
Wavelength tuning resolution	≤ 10 pm	≤ 10 pm	≤ 10 pm
Signal to Source ASE Ratio <sup>4</sup>	≥ 60 dB	≥ 60 dB	≥ 60 dB
Linewidth (FWHM)	18 to 53 GHz	18 to 53 GHz	≤ 53 GHz
Step tuning time	50 ms	50 ms	50 ms
Maximum sweep speed	400 nm/s	400 nm/s	400 nm/s
Power supply	110/220 V; 50/60 Hz; 60 W	110/220 V; 50/60 Hz; 60 W	110/220 V; 50/60 Hz; 60 W
Trigger output (BNC)	4 V pulse during sweep, 0 V when sweep has completed	4 V pulse during sweep, 0 V when sweep has completed	4 V pulse during sweep, 0 V when sweep has completed
Analog power output (BNC)	0 to 4 V linearly proportional to laser power in mW	0 to 4 V linearly proportional to laser power in mW	0 to 4 V linearly proportional to laser power in mW

General Specifications	1004	1005	1006
Operating wavelength range <sup>1</sup>	1260 to 1340 nm	1260 to 1420 nm	1520 to 1580 nm
Output power (one port)	≥ 5 mW	≥ 2 mW	≥ 10 mW
Power stability <sup>2</sup>	± 0.01 dB	± 0.01 dB	± 0.01 dB
Power repeatability <sup>3</sup>	≤ ± 0.05 dB	≤ ± 0.05 dB	≤ ± 0.05 dB
Wavelength stability <sup>2</sup>	≤ ± 10 pm	≤ ± 10 pm	≤ ± 10 pm
Wavelength tuning resolution	≤ 10 pm	≤ 10 pm	≤ 10 pm
Signal to Source ASE Ratio <sup>4</sup>	≥ 60 dB	≥ 60 dB	≥ 60 dB
Linewidth (FWHM)	< 200 MHz	< 200 MHz	< 200 MHz
Step tuning time	50 ms	50 ms	50 ms
Maximum sweep speed	120 nm/s	120 nm/s	120 nm/s
Power supply	110/220 V; 50/60 Hz; 60 W	110/220 V; 50/60 Hz; 60 W	110/220 V; 50/60 Hz; 60 W
Trigger output (BNC)	4 V pulse every 10 pm	4 V pulse every 10 pm	4 V pulse every 10 pm
Analog power output (BNC)	0 to 4 V linearly proportional to laser power in mW	0 to 4 V linearly proportional to laser power in mW	0 to 4 V linearly proportional to laser power in mW

### Notes

- Wavelength is calibrated as "Mean wavelength".
- When measured after warm-up time, measurements over 125+1C.
- For output power > 0 dBm with Tuning Speed 100nm/s, repeated over 100 measurements
- ASE is measured at 0.1 nm bandwidth and +-1 nm away from center wavelength

## ORDERING INFORMATION

LASER - **XXXX** - **XX** - **EPIQ**



### Model number

- 1001** = 1260 to 1340 nm wavelength range,  
5 mW output power, 18 to 53 GHz linewidth
- 1002** = 1260 to 1420 nm wavelength range,  
2 mW output power, 18 to 53 GHz linewidth
- 1003** = 1520 to 1580 nm wavelength range,  
10 mW output power,  $\leq$  53 GHz linewidth
- 1004** = 1260 to 1340 nm wavelength range,  
5 mW output power, < 200 MHz linewidth
- 1005** = 1260 to 1420 nm wavelength range,  
2 mW output power, < 200 MHz linewidth
- 1006** = 1520 to 1580 nm wavelength range,  
10 mW output power, < 200 MHz linewidth

### Connector type

- FC** = FC/PC
- FA** = FC/APC
- SC** = SC/PC
- SA** = SC/APC

## WARRANTY INFORMATION

This product comes with a standard 1 year warranty.

Optional 3 or 5 year extended warranties are also available, please discuss with your sales representative at the time of purchase.

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