Measurement Devices

QUANTIFI PHOTONICS™

LASER COMPONENTS

LASER

SWEPT, TUNABLE, CONTINUOUS WAVE (CW) LASER SOURCE

SPECIFICATION SHEET

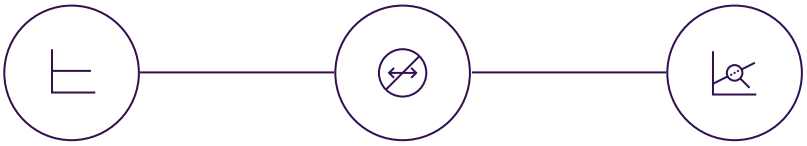
Germany & Other Countries
Laser Components GmbH
Tel: +49 8142 2864 – 0
Fax: +49 8142 2864 – 11
info@lasercomponents.com
www.lasercomponents.com

United Kingdom
Laser Components (UK) Ltd.
Tel: +44 1245 491 499
Fax: +44 1245 491 801
info@lasercomponents.co.uk
www.lasercomponents.co.uk

FEATURES

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.

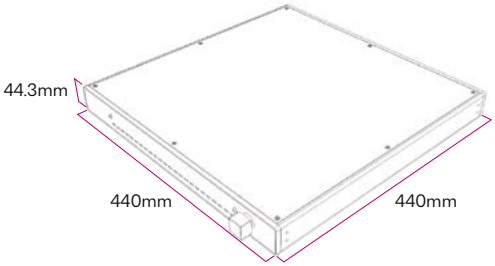
Germany & Other Countries
Laser Components GmbH
Tel: +49 8142 2864 – 0
Fax: +49 8142 2864 – 11
info@lasercomponents.com
www.lasercomponents.com

United Kingdom
Laser Components (UK) Ltd.
Tel: +44 1245 491 499
Fax: +44 1245 491 801
info@lasercomponents.co.uk
www.lasercomponents.co.uk

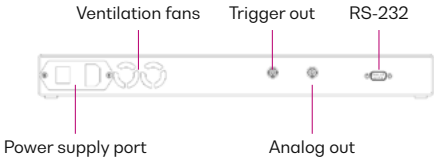
EPIQ LASER INSTRUMENT AND DIMENSIONS

EPIQ-LASER-1001

Instrument dimensions



Rear panel connections



TARGET APPLICATIONS

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

Germany & Other Countries
Laser Components GmbH
Tel: +49 8142 2864 – 0
Fax: +49 8142 2864 – 11
info@lasercomponents.com
www.lasercomponents.com

United Kingdom
Laser Components (UK) Ltd.
Tel: +44 1245 491 499
Fax: +44 1245 491 801
info@lasercomponents.co.uk
www.lasercomponents.co.uk

EPIQ LASER TECHNICAL SPECIFICATIONS

General Specifications	1001	1002	1003
Operating wavelength range [1]	1260 to 1340 nm	1260 to 1420 nm	1520 to 1580 nm
Output power (one port)	≥ 5 mW	≥ 2 mW	≥ 10 mW
Power stability [2]	± 0.01 dB	± 0.01 dB	± 0.01 dB
Power repeatability [3]	≤ ± 0.05 dB	≤ ± 0.05 dB	≤ ± 0.05 dB
Wavelength stability [2]	≤ ± 10 pm	≤ ± 10 pm	≤ ± 10 pm
Wavelength tuning resolution	≤ 10 pm	≤ 10 pm	≤ 10 pm
Signal to Source ASE Ratio [4]	≥ 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 [1]	1260 to 1340 nm	1260 to 1420 nm	1520 to 1580 nm
Output power (one port)	≥ 5 mW	≥ 2 mW	≥ 10 mW
Power stability [2]	± 0.01 dB	± 0.01 dB	± 0.01 dB
Power repeatability [3]	≤ ± 0.05 dB	≤ ± 0.05 dB	≤ ± 0.05 dB
Wavelength stability [2]	≤ ± 10 pm	≤ ± 10 pm	≤ ± 10 pm
Wavelength tuning resolution	≤ 10 pm	≤ 10 pm	≤ 10 pm
Signal to Source ASE Ratio [4]	≥ 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
1. Wavelength is calibrated as "Mean wavelength".
2. When measured after warm-up time, measurements over 1 25+1C.
3. For output power > 0 dBm with Tuning Speed 100nm/s, repeated over 100 measurements
4. ASE is measured at 0.1 nm bandwidth and +-1 nm away from center wavelength

Germany & Other Countries
Laser Components GmbH
Tel: +49 8142 2864 – 0
Fax: +49 8142 2864 – 11
info@lasercomponents.com
www.lasercomponents.com

United Kingdom
Laser Components (UK) Ltd.
Tel: +44 1245 491 499
Fax: +44 1245 491 801
info@lasercomponents.co.uk
www.lasercomponents.co.uk

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, ≤ 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.

Germany & Other Countries
Laser Components GmbH
Tel: +49 8142 2864 – 0
Fax: +49 8142 2864 – 11
info@lasercomponents.com
www.lasercomponents.com

United Kingdom
Laser Components (UK) Ltd.
Tel: +44 1245 491 499
Fax: +44 1245 491 801
info@lasercomponents.co.uk
www.lasercomponents.co.uk

LASER COMPONENTS

WHY CHOOSE QUANTIFI PHOTONICS

Test. Measure. Solve.

Quantifi Photonics strives to transform the world of optical test and measurement. Our portfolio of optical test modules is rapidly expanding to meet the needs of engineers and scientists around the globe. From enabling ground-breaking experiments to driving highly-efficient production testing, you'll find us working with customers to solve problems with optimal solutions.

To find out more, get in touch with us today.

Version 1.2.5

Germany & Other Countries
Laser Components GmbH
Tel: +49 8142 2864 – 0
Fax: +49 8142 2864 – 11
info@lasercomponents.com
www.lasercomponents.com

United Kingdom
Laser Components (UK) Ltd.
Tel: +44 1245 491 499
Fax: +44 1245 491 801
info@lasercomponents.co.uk
www.lasercomponents.co.uk