

Worldwide Distributors

Baltic, Nordic

Von Gegerfelt Photonics

Tel.: +49-6251 860 99 20
Fax: +49-6251 860 99 17
dvg@vgphotonics.eu
www.vgphotonics.eu

Japan

Japan Laser Corp.

Tel.: +81-352 85 08 61
Fax: +81-352 85 08 60
lase@japanlaser.jp
www.japanlaser.jp

Taiwan

Tayhwa Technology Co. Ltd.

Tel.: +88-62 23 56 97 37
Fax: +88-62 23 56 96 59
tayhwa@tayhwa.com.tw
www.tayhwa.com.tw

Benelux

Applied Laser Technology (ALT)

Tel.: +31-499 37 53 75
Fax: +31-499 37 53 73
info@alt.nl
www.alt.nl

Korea

DongWoo Optron Co., Ltd.

Tel.: +82-317 65 03 00
Fax: +82-317 65 02 22
optron@optron.co.kr
www.optron.co.kr

Turkey

Mitra Anonim Sirketi

Tel.: +90-212 347 47 40
Fax: +90-212 347 47 45
info@mitralaser.com
www.mitralaser.com

China

Pinnacle Scientific Corporation

Tel.: +86-571 88 22 51 51
Fax: +86-571 88 22 52 52
sales@psci.cn
www.psci.cn

Poland

Amecam

Tel.: +48-22 207 22 78
Fax: +48-22 207 28 77
amecam@amecam.pl
www.amecam.pl

UK

Photon Lines Ltd.

Tel.: +44-12 95 72 42 25
Fax: +44-12 95 72 42 26
info-uk@photonlines.com
www.photonlines

France

Photon Lines

Tel.: +33-130 08 99 00
Fax: +33-130 08 99 09
info@photonlines.com
www.photonlines.fr

Spain

LASER Technology S.L.

Tel.: +34-937 50 01 21
Fax: +34-937 50 03 23
josecochon@laser-technology.com
www.laser-technology.com

USA

Market Tech, Inc.

Tel.: +1-83 14 61 11 01
Fax: +1-83 14 61 11 36
info@markettechinc.net
www.markettechinc.net

Italy

LOT-QuantumDesign s.r.l.

Tel.: +39-06 500 42 04
Fax: +39-06 50 10 389
info@lot-qd.it
www.lot-qd.it

Singapore/Malaysia

PhotonTech Pte Ltd

Tel.: +65-65 70 33 86
Fax: +65-62 33 91 71
csales@photonitech.com
www.photonitech.com

Switzerland, Liechtenstein

GMP SA

Tel.: +41-216 33 21 21
Fax: +41-216 33 21 29
info@gmp.ch
www.gmp.ch



Omicron-Laserage Laserprodukte GmbH
Raiffeisenstrasse 5e
63110 Rodgau, Germany
Tel.: +49-61 06 82 24-0
Fax: +49-61 06 82 24-10
mail@omicron-laser.de
www.omicron-laser.de



March 2014



Ultra Compact
High Performance Diode Lasers

LUX X⁺



Digital modulation up to
250 MHz

Analogue modulation
>3 MHz

Fast full ON/OFF shutter
function

High stability CW
operation

Ultra compact
one-box-solution

>20 wavelengths available

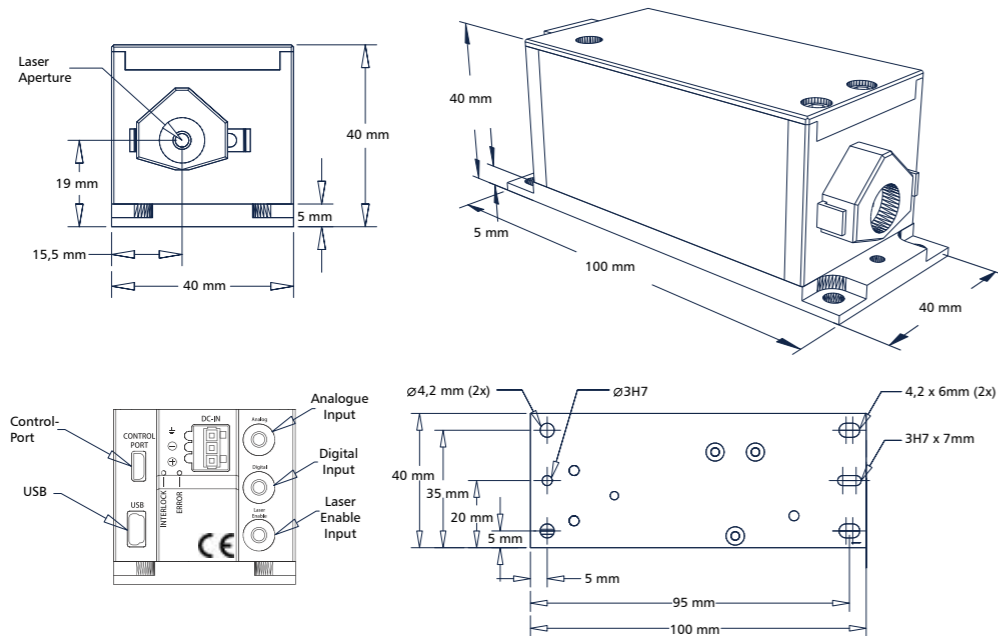
RS-232 and USB 2.0 Interface

The Omicron LuxX[®] + Laser Series offers high-performance at a compact design. A broad variety of wavelengths and single-mode emission up to 300mW cover a wide range of applications. Easy integration into existing or future designs is assured by versatile input signal types. The USB2.0 and the RS-232 interface support deep integration of the lasers into the application's process.

LUXX+ dimensions

Applications:

- Flow Cytometry
- Microscopy
- Test and Measurement
- Machine Vision
- CTP
- Microlithography
-



Model	LuxX+ 375 - 20 / 70		LuxX+ 395		LuxX+ 405 - 80 / 120 / 300		LuxX+ 415		LuxX+ 425		LuxX+ 445 - 50 / 100		LuxX+ 457		LuxX+ 460		LuxX+ 473 - 20 / 100		LuxX+ 488 - 25 / 60 / 80 / 100 / 200		LuxX+ 505		LuxX+ 515 - 25 / 50 / 80 / 100		LuxX+ 531 - 20 / 50		LuxX+ 633		LuxX+ 638 - 40 / 100 / 150		LuxX+ 642		LuxX+ 647		LuxX+ 680		LuxX+ 685		LuxX+ 705		LuxX+ 730		LuxX+ 785		LuxX+ 808		LuxX+ 830	
Wavelength (+/- 5nm)	375nm	395nm	405nm	415nm	425nm	445nm	457nm	460nm	473nm	488nm	505nm	515nm	561nm	633nm	638nm	642nm	647nm	660nm	685nm	705nm	730nm	785nm	808nm	830nm																								
Optical output power	20mW 70mW	120mW	60mW 120mW 300mW	120mW	120mW	50mW 100mW	100mW	100mW	20mW 100mW	25mW 60mW 80mW 100mW 200mW	80mW	25mW 50mW 80mW	20mW 50mW	100mW	40mW 100mW 150mW	140mW	140mW	130mW	50mW	40mW	40mW	120mW	140mW	140mW																								
Typical beam diameter (1/e ²)	1.0...1.5mm (1/e ²), (depends on wavelength) - 0.7mm (1/e ²) +/- 0.1mm with option XX.DSO																																															
Beam quality M ²	< 1.15 (typical 1,05)																																															
Beam ellipticity	< 1.1:1																																															
Beam pointing stability (µrad/°C)	< 5																																															
Polarisation ratio	> 100:1 vertical																																															
Warm up time	< 3 minutes																																															
Operation modes																																																
Mode 1	CW Operation (APC and ACC)																																															
Mode 2	Analogue Modulation																																															
Mode 3	Digital Modulation																																															
Mode 4	Mixed Analogue & Digital Modulation																																															
Digital modulation																																																
Modulation bandwidth	> 250MHz																																															
Signal type	TTL (200 Ohm) / 0...1V (50 Ohm) / LV-PECL / PECL / LVDS (user-configurable)																																															
Analogue modulation																																																
Modulation bandwidth	> 3MHz																																															
Signal type	0...1V (50 Ohm) / 0...5V (1.2k Ohm) (user-configurable)																																															
Laser enable input																																																
Modulation bandwidth	> 500kHz (complete ON/OFF)																																															
Signal type	TTL (2 kOhm)																																															
RMS noise characteristics																																																
20Hz ... 20MHz	< 0.2%																																															
Long-term power stability (8h)	(< 0.5% in CW operation mode)																																															
Electrical properties																																																
Laser operating voltage	12 VDC +/- 0.50V																																															
Computer interface																																																
Type	RS-232 and USB2.0																																															
Mechanical properties																																																
Dimensions laser head	100 x 40 x 40 mm (l x w x h)																																															