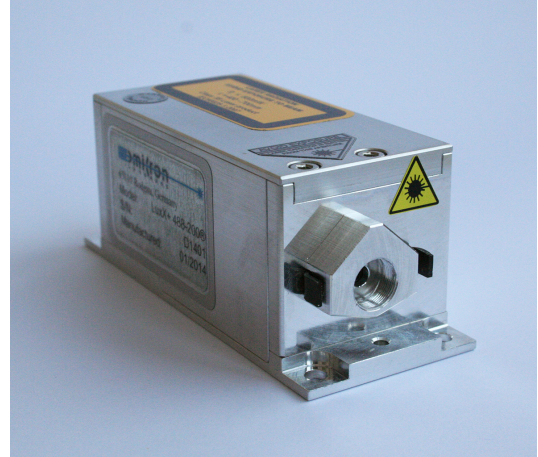


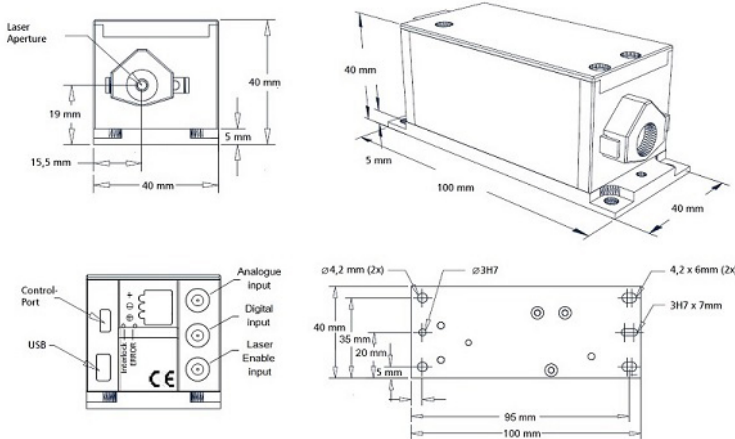
LUX X⁺

Compact high-performance diode laser modules for biotech and industrial applications

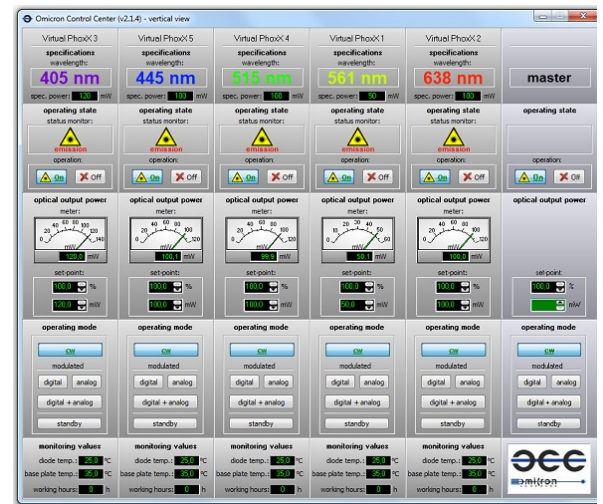


The Omicron LuxX⁺ Laser Series offers high-performance at a compact design. A broad variety of wavelengths and single-mode emission up to 300mW cover a wide range of applications. Easy integration into existing or future designs is assured by versatile input signal types. The USB2.0 and the RS-232 interface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

Dimensions:



Control Software



Specifications LuxX+ Diode Laser Series				
Wavelengths & Powers (other wavelengths and powers on request)	LuxX+® Series			
	LuxX+® 375-20	375nm / 20mW	LuxX+® 515-100	515nm / 100mW
	LuxX+® 375-70	375nm / 70mW	LuxX+® 515-150	515nm / 150mW
	LuxX+® 395	395nm / 120mW	LuxX+® 633-100	633nm / 100mW
	LuxX+® 405-20	405nm / 20mW	LuxX® 638-40	638nm / 40mW
	LuxX+® 405-60	405nm / 60mW	LuxX+® 638-100	638nm / 100mW
	LuxX+® 405-120	405nm / 120mW	LuxX+® 638-150	638nm / 150mW
	LuxX+® 405-300	405nm / 300mW	LuxX+® 638-200	638nm / 200mW
	LuxX+® 415	415nm / 120mW	LuxX+® 642	642nm / 140mW
	LuxX+® 425	425nm / 120mW	LuxX+® 647	647nm / 140mW
	LuxX+® 445-50	445nm / 50mW	LuxX+® 660	660nm / 130mW
	LuxX+® 445-100	445nm / 100mW	LuxX+® 685	685nm / 50mW
	LuxX+® 457	457nm / 100mW	LuxX+® 705	705nm / 40mW
	LuxX+® 460	460nm / 100mW	LuxX+® 730	730nm / 40mW
	LuxX+® 473-20	473nm / 20mW	LuxX+® 785-120	785nm / 120mW
	LuxX+® 473-80	473nm / 80mW	LuxX+® 785-200	785nm / 200mW
	LuxX+® 473-100	473nm / 100mW	LuxX+® 808	808nm / 140mW
	LuxX+® 488-25	488nm / 25mW	LuxX+® 830	830nm / 140mW
	LuxX+® 488-60	488nm / 60mW	LuxX+® 850	850nm / 100mW
	LuxX+® 488-80	488nm / 80mW	LuxX+® 945	945nm / 200mW
LuxX+® 488-100	488nm / 100mW	LuxX+® 980	980nm / 100mW	
LuxX+® 488-150	488nm / 150mW	LuxX+® 1030	1030nm / 100mW	
LuxX+® 488-200	488nm / 200mW	LuxX+® 1060	1060nm / 150mW	
LuxX+® 505-80	505nm / 80mW	LuxX+® 1080	1080nm / 80mW	
LuxX+® 515-25	515nm / 25mW	LuxX+® 1310	1310nm / 50mW	
LuxX+® 515-50	515nm / 50mW	LuxX+® 1550	1550nm / 100mW	
LuxX+® 515-80	515nm / 80mW			
Beam diameter (other diameters on request)	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 (1.05 typical)			
Astigmatism (corrected)	<0.2°ZR			
Beam ellipticity	<1.15:1			
Polarisation	>100:1 vertical			
Long term power stability	<0.5% / 8h			
RMS Noise 20Hz...20MHz	<0.2% (CW)			
Operation Modes				
Mode 1	CW operation (ACC - Automatic Constant Current)			
Mode 2	CW operation (APC - Automatic Power Control)			
Mode 3	Analogue modulation			
Mode 4	Digital modulation			
Mode 5	Analogue + Digital modulation			
Analogue modulation	>3MHz			
Input signal type	0...5V (1.2kOhm) or 0...1V (500hm) - user configurable			
Digital modulation	>250MHz			
Input signal type	Single-ended input: TTL (2000hm) or 0...1V (500hm) - user configurable Differential-ended input: PECL / LVDS / HSTL etc. - autom. detected			
Laser Enable (electronic shutter)	>500kHz (full ON/OFF)			
Input signal type	TTL (2kOhm)			
Rise- and falltime	Analogue: < 100ns Digital: < 1.5ns Laser Enable: < 100ns			
Extinction ratio	Analogue: > 1000 : 1 Digital: > 250 : 1 Laser Enable: infinite (full ON/OFF)			
Supply voltage	12.00 VDC +/- 0.50 VDC			
Control interface	RS-232 and USB 2.0			
Dimensions laser head	100 x 40 x 40mm (l x w x h)			
Options & Accessories				
	LUXOPLUS.PSU	world wide power supply unit for LuxX+ series lasers		
	XX.DSO	collimator objective for 0.7mm (1/e ²) beam diameter		
	LUXOPLUS.CDRH	remote control box with key switch and emission LED for CDRH compliant operation		
	LUXOPLUS.HEATSINK	standard heatsink for LuxX+ Series laser heads		
	XX.FASYADAP	Fiber coupling adapter mount for LDM Series fiber coupling units and other fiber coupling systems with 1-inch grid mounting holes		

Laser Safety classification:

INVISIBLE LASER RADIATION
AVOID EXPOSURE TO BEAM
P_e ≤ 500mW
λ = 315 - 400nm
Class 3B Laser product
IEC60825-1:2014

LASER RADIATION
AVOID EXPOSURE TO BEAM
P_e ≤ 500mW
λ = 400 - 700nm
Class 3B Laser product
IEC60825-1:2014

INVISIBLE LASER RADIATION
AVOID EXPOSURE TO BEAM
P_e ≤ 500mW
λ = 700 - 1064nm
Class 3B Laser product
IEC60825-1:2014

INVISIBLE LASER RADIATION
AVOID EXPOSURE TO BEAM
P_e ≤ 500mW
λ = 1064 - 1600nm
Class 3B Laser product
IEC60825-1:2014

