



# DATASHEET

01.2019

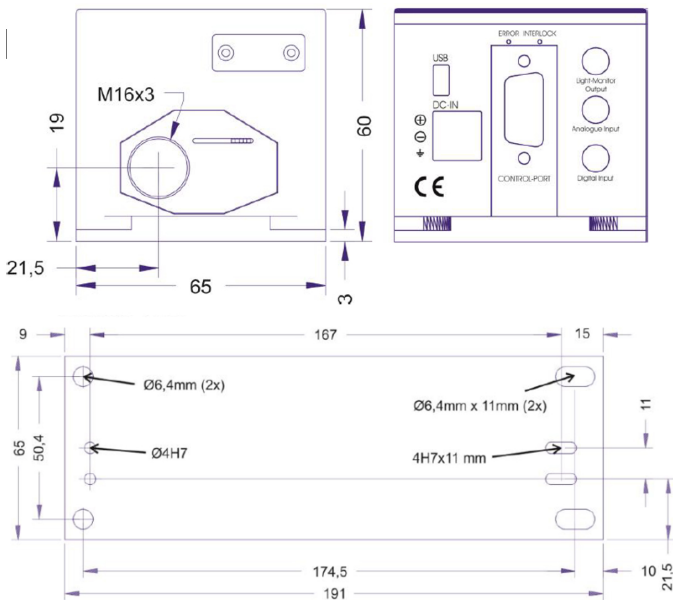
# BrixX<sup>®</sup> HP

High-Power visible and NIR diode lasers

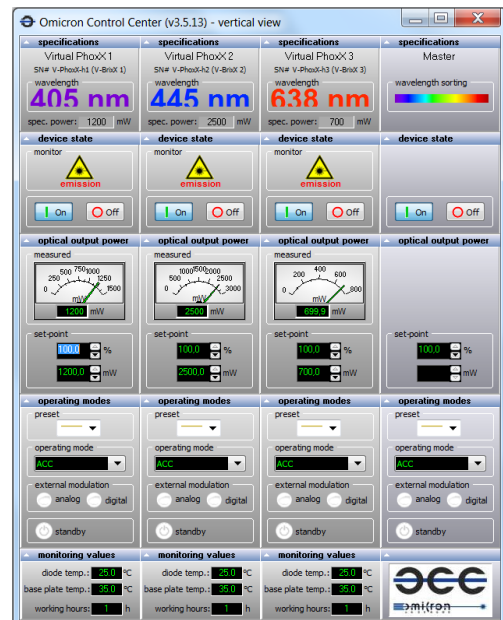


The versatility of the BrixX<sup>®</sup> HP lasers covers a wide range of applications like widefield laser microscopy, optogenetics, semiconductor material testing, machine vision and many more. Depending on the model, the lasers offer a collimated, beam shaped free-space output with single- or multiple transverse mode quality. The precise TEC-cooling of the laser diodes and fast and accurate laser current control guarantees stable output power and a stable emission spectrum. Analogue intensity control and digital modulation as well as a Light-Monitoring output can be used to control the laser by electronic signals. The USB2.0 and the RS-232 interface allow deep integration into PC controlled setups and software environments like LabView. The

### Dimensions:



### Control Software:



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[mail@omicron-laser.de](mailto:mail@omicron-laser.de)

For more online information:



Specifications BrixX HP Diode Laser Series	
	BrixX® HP Series
<b>Wavelengths &amp; Powers</b> (other wavelengths and powers on request)	<b>Modell</b>
	BrixX® 375-400 HP 375nm / 400mW MM free space
	BrixX® 405-1200 HP 405nm / 1200mW MM free space
	BrixX® 445-2500 HP 445nm / 2500mW MM free space
	BrixX® 445-5000 HP 445nm / 5000mW MM free space
	BrixX® 473-1000 HP 473nm / 1000mW MM free space
	BrixX® 488-2000 HP 488nm / 2000mW MM free space
	BrixX® 520-1000 HP 520nm / 1000mW MM free space
	BrixX® 638-700 HP 638nm / 700mW MM free space
	BrixX® 647-500 HP 647nm / 500mW MM free space
	BrixX® 750-1500 HP 750nm / 1500mW MM free space
	BrixX® 785-250 HP 785nm / 250mW SM FC/APC
	BrixX® 808-2500 HP 808nm / 2500mW MM free space
BrixX® 808-800 HP 808nm / 800mW SM free space	
<b>Polarisation</b>	>100:1 vertical for single-mode (SM or SM PM) models for Multi-mode (MM) models, polarisation depends on laser type
<b>Long term power stability</b>	<1% / 8h
<b>RMS Noise 20Hz...10MHz</b>	<0.5% (CW)
<b>10MHz...500MHz</b>	<0.5% (CW)
<b>Operation Modes</b>	
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
<b>Analogue modulation</b>	>1.5MHz
<b>Input signal type</b>	0...5V / 1,2kOhm or 0...1V / 50 Ohm (user selectable via software)
<b>Digital modulation</b>	>1.5MHz
<b>Input signal type</b>	TTL (2kOhm)
<b>Laser Enable (electronic shutter)</b>	>500kHz (full ON/OFF)
<b>Input signal type</b>	TTL (2kOhm)
<b>Rise- and falltime</b>	Analogue: < 200ns Digital: < 200ns Laser Enable: < 500ns
<b>Extinction ratio</b>	Analogue: > 1000 : 1 Digital: >250:1 Laser Enable: infinite (full ON/OFF)
<b>Supply voltage</b>	12 ... 24 VDC nominal (11.0 ... 25VDC max.)
<b>Control interface</b>	RS-232 and USB 2.0
<b>Dimensions laser head</b>	186 x 65 x 60 mm (l x w x h)
<b>Options &amp; Accessories</b>	<hint> <b>BRIXX.PSU</b> <hint>Switch-mode power supply unit with 85-245VAC, 50/60Hz input and 24VDC / 3Amp. output<hint>  <b>XX.CDRH</b>
	world wide power supply unit for BrixX series lasers  remote control box with key switch and emission LED for CDRH compliant operation

## Laser Safety classification:

Class 3B:  
315-400nm:



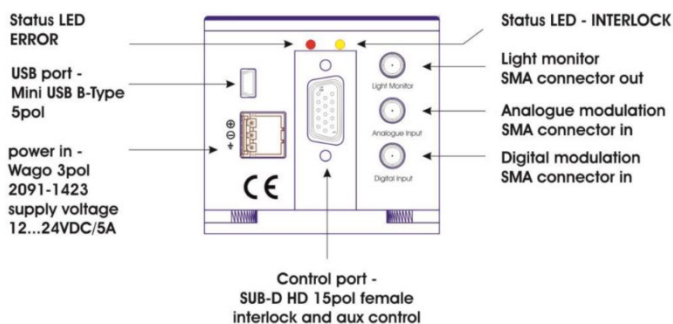
Class 4:  
400-700nm:



700-1064nm:



## Control Interface



## Ordering Code

