

## DATASHEET

# LBX-638-HPE Laser Diode

## **Optical characteristics \***

Emission wavelength	638 nm	
Wavelength range	± 10 nm	
Linewidth	≤ 5 nm; 2 nm typical	
Output power	Free space	Fiber coupling
	1100 mW	880 mW
Control mode(s)	Automatic Power Control (APC) Automatic Current control (ACC)	

Power stability over 8 hours and within ±3k ± 1%

#### - Transverse multimode free-space beam

Beam dimensions (typ) at 1/e <sup>2</sup> , at laser aperture	1.3 X 4.5 mm
Beam divergence at 1/e <sup>2</sup> , full angle, in far field	7.0 X 0.2 mrad

#### - Modulation functions

#### **Analog Modulation**

#### 0-5V input voltage

Bandwidth	DC-1 MHz	
3dB cut-off frequency, ACC mode		
Rise/fall time, 10%-90%	≤ 500 ns	

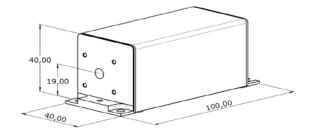
## Fiber coupling option

	<b>MM Fiber</b> (50 μm, 0.22 NA)
Coupling Efficiency	≥ 80%
Available optical connector	AR-coated SMA FC-APC
Power stability over 8 hours and within ±3k	±2%
Fiber length	2.0 m

Warranty : 12 months from shipment date \*specification at nominal power



## System specifications



#### Plug and Play version provided with :

ControlBoxx

### Other options

- Heatsink. Including Power Supply
- L6Cc-HPE wavelength combiner compatibility
- Electro-mechanical shutter
- External modulator
- Specific beam shaping

## **General specifications**

	Plug and Play version	OEM version
Compliance	CE FDA 21 CFR 1040.10/1040.1	FDA 21 CFR 1040.10 / 1040.11
Operating temperature	10 - 38°C ambiant air with optional heat sink	10 - 50°C baseplate
Power consumption	≤ 25 W	≤ 10 W
Storage temperature	0 to 60°C	
Supply voltage	100 to 240 VAC external power supply	5 to 12 VDC
Warm-up time	≤ 2 minutes	
Interfaces	USB, RS-232, dedicated electronic interface	

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Oxxius operates a continuous improvement programme which can result in specifications being modified without notice.