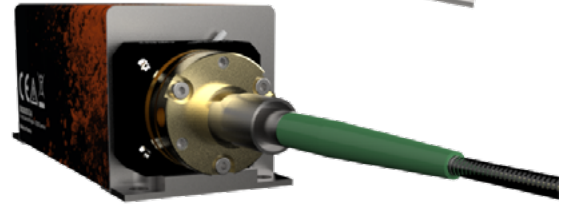


# LBX-638-HPE Laser Diode



## Optical characteristics \*

Emission wavelength	638 nm	
Wavelength range	± 10 nm	
Linewidth	≤ 5 nm; 2 nm typical	
Output power	<b>Free space</b> 1100 mW	<b>Fiber coupling</b> 880 mW
Control mode(s)	Automatic Power Control (APC) Automatic Current control (ACC)	
Power stability <small>over 8 hours and within ±3k</small>	± 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

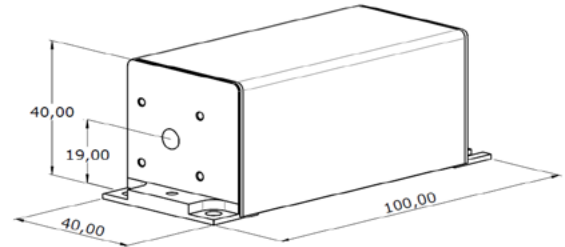
**0-5V input voltage**

**Bandwidth** DC-1 MHz

3dB cut-off frequency, ACC mode

**Rise/fall time, 10%-90%** ≤ 500 ns

## 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

## Fiber coupling option

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

Warranty : 12 months from shipment date

\*specification at nominal power

## 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 ambient 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	



## CONTACT US

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