

LBX-638-HPE Laser Diode

Optical characteristics *

638 nm **Emission wavelength** Wavelength range ± 10 nm

Linewidth ≤ 5 nm; 2 nm typical

Output power Free space Fiber coupling

> 1100 mW 880 mW

Automatic Power Control (APC) Control mode(s)

Automatic Current control (ACC)

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

- Transverse multimode free-space beam

Beam dimensions (typ) 1.3 X 4.5 mm

Beam divergence 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

MM Fiber (50 µm, 0.22 NA)

Coupling Efficiency ≥ 80%

Available optical connector

AR-coated SMA FC-APC

Power stability

over 8 hours and within ±3k

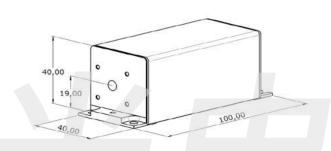
±2%

2.0 m Fiber length

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	