

LBX-830 - HPE Laser Diode

Optical characteristics *

Emission wavelength 830 nm Wavelength range ± 5 nm

≤ 5 nm; 2 nm Linewidth

typical

Output power Free space Fiber coupled

> 1200 mW 960 mW

Control mode(s) Automatic Current control (ACC)

Power stability ± 1%

- Transverse multimode free-space beam

Beam dimensions (typ) 5.2 X 2.6 mm at 1/e2, at laser aperture

Beam divergence 0.3 X 22 mrad at 1/e2, full angle, in far field

- Modulation functions

Analog Modulation

0-5V input voltage

Bandwidth DC-1 MHz

3dB cut-off frequency, ACC mode

Rise/fall time, 10%-90% ≤ 200 ns

Fiber coupling option

MM Fiber

(200 µm, 0.22 NA)

Coupling Efficiency ≥ 80%

Available optical

AR-coated SMA FC-APC

connector

Power stability ±2%

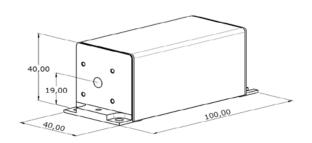
over 8 hours and within ±3k

 $2.0 \; \text{m}$ 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	