

MaxxPower

By Oxxius

Gamme	High-Power Diode Modules
Title	MaxxPower 830 nm
Reference	LBX-830
Description	<p>The MaxxPower LBX-830 is a compact 830 nm laser source that exhibits the highest optical power over an industry-standard 100×40 mm footprint. Its robust design, complete with readily available safety features makes it well-suited for both laboratory and industrial use. This model is a trusted solution for illumination or wide-field microscopy.</p> <p>Key features</p> <ul style="list-style-type: none">• $\pm 1.0\%$ long-term power stability; low optical noise• Modulation up to 1 MHz• Integrated control electronics <p>Fully compatible with Oxxius MixxWave combiners for multi-mode fiber delivery in conjunction with other laser lines.</p>



Product Variations

Part Number	Puissance
LBX-830-1200-HPE-PPA	1200mW

Optical Characteristics

Emission wavelength	830 nm
Tolerance	($\pm 5\text{nm}$ tolerance)
Control modes	Automated power control (APC), Automated current control (ACC)
Optical noise	$\leq 0.2\%$ rms, 10Hz-20MHz bandwidth
Spectral linewidth	$\leq 2\text{nm}$

Analog modulation function - Rise / fall time	≤ 200ns
Analog modulation function - Bandwidth	≥ 1MHz
Beam diameter, 1/e² level, 50mm from the beam aperture	5.2 x 2.6mm
Beam divergence, 1/e² level full beam, far field	0.3 x 22mrad

General Specifications

Supply voltage	5V to 12V
Operating temperature	10°C to 50°C
Storage temperature and humidity	0°C to 60°C
Warm up time	≤2 minutes
Interfaces	USB, RS-232, direct modulation inputs
Dimensions (laser head)	100x40x40 mm
Weight (laser head)	≤330 g
Controller dimensions	106x126x56 mm
Compliance	CE (incl. IEC 60825-1) and FDA 21 CFR 1040.10 / 1040.11
Laser class	4
Warranty	24 months or 5000 hours, whichever occurs first

Options

Option 1	Multimode fiber coupling
Option 2	Heat management
Option 3	OEM version