

FlexxRay

By Oxxius

Gamme	CW & Modulated Lasers
Title	FlexxRay 553 nm (adjustable power)
Reference	LCX-553L (adjustable power)
	<p>The FlexxRay LBX-553 is a compact 553nm laser source delivering one of the highest power available on the market over a beam of superior quality. Its robust design, complete with readily available safety features makes it well-suited for both laboratory and industrial use.</p>
Description	<p>Key features</p> <ul style="list-style-type: none">• TEM₀₀ spatial mode• ±1.0% long-term power stability• User-adjustable optical power• Integrated control electronics <p>Fully compatible with Oxxius MixxWave combiners for single-mode fiber delivery alongside other laser lines.</p>



Product Variations

Part Number	Puissance
LCX-553L-50-CSB-PPA	50mW
LCX-553L-100-CSB-PPA	100mW
L1C-553L-200-CSB-MPA	200mW

Optical Characteristics

Emission wavelength	553 nm
Tolerance	(±0.4nm tolerance)
Control modes	Automated power control, fixed or adjustable power level
Optical noise	≤ 0.5% rms, 10Hz-20MHz bandwidth

Spectral linewidth	$\leq 0.1\text{nm}$
Beam diameter, 1/e² level, 50mm from the beam aperture	$0.7 \pm 0.1\text{mm}$
Beam divergence, 1/e² level full beam, far field	$\leq 1\text{mrad}$
Beam quality factor M²	1.1
Beam circularity, far field	$\geq 90\%$
Polarization state	Linear, vertical, extinction ratio $\geq 20\text{dB}$

General Specifications

Power consumption	20 W max.
Supply voltage	5V to 12V (up to 100mW) 7V to 12V (200mW)
Operating temperature	10°C to 50°C
Storage temperature and humidity	0°C to 60°C
Warm up time	≤ 10 minutes
Interfaces	USB, RS-232
Dimensions (laser head)	100x40x32 mm (up to 100mW) 154x62x64 mm (200mW)
Weight (laser head)	≤ 250 g (up to 100mW) ≤ 1150 g (200mW)
Controller dimensions	109x84x30 mm
Compliance	CE (incl. IEC 60825-1) and FDA 21 CFR 1040.10 / 1040.11
Laser class	3B
Warranty	24 months or 10000 hours, whichever occurs first

Options

Option 1	Single-mode fiber coupling
Option 2	Multimode fiber coupling
Option 3	Heat management
Option 4	High rate modulation
Option 5	Optical Isolator
Option 6	OEM version