

# FlexxRay

By Oxxius

<b>Gamme</b>	CW & Modulated Lasers
<b>Title</b>	FlexxRay 553 nm (fixed power)
<b>Reference</b>	LCX-553L (fixed 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>
<b>Description</b>	<p>Key features</p> <ul style="list-style-type: none"><li>• TEM<sub>00</sub> spatial mode</li><li>• ±1.0% long-term power stability</li><li>• Integrated control electronics</li><li>• 100×40 mm industry-standard footprint</li></ul> <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-PPF	50mW
LCX-553L-100-CSB-PPF	100mW
LCX-553L-200-CSB-PPF	200mW

## Optical Characteristics

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

<b>Spectral linewidth</b>	$\leq 0.1\text{nm}$
<b>Beam diameter, 1/e<sup>2</sup> level, 50mm from the beam aperture</b>	$0.7 \pm 0.1\text{mm}$
<b>Beam divergence, 1/e<sup>2</sup> level full beam, far field</b>	$\leq 1\text{mrad}$
<b>Beam quality factor M<sup>2</sup></b>	1.1
<b>Beam circularity, far field</b>	$\geq 90\%$
<b>Polarization state</b>	Linear, vertical, extinction ratio $\geq 20\text{dB}$

## General Specifications

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

## Options

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