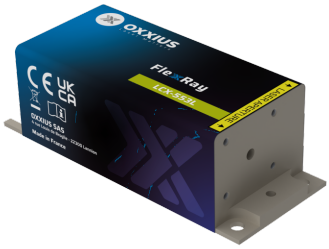
FlexxRay
By Oxxius

Product range	CW & Modulated Lasers
Product name	FlexxRay 553 nm (fixed power)
Reference	LCX-553L (fixed power)
Description 	The FlexxRay LCX-553L 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. **Key features** • TEM_{00} spatial mode • ±1.0 % long-term power stability • Integrated control electronics • 100×40 mm industry-standard footprint Fully compatible with Oxxius MixxWave combiners for single-mode fiber delivery alongside other laser lines.

Product Variations

Part Number	Power
LCX-553L-50-CSB-PPF	50 mW
LCX-553L-100-CSB-PPF	100 mW
LCX-553L-200-CSB-PPF	200 mW

Optical Characteristics

Emission wavelength	553 nm
Tolerance	(±0.4 nm tolerance)
Power stability over 8 hours, temperature within ±3°C	±1.0 %
Control modes	Automated power control, fixed or adjustable power level
Optical noise	≤0.5 % rms, 10 Hz-20 MHz bandwidth
Spectral linewidth	≤0.1 nm
Beam diameter, 1/e² level, 50mm from the beam aperture	0.7 ±0.1 mm
Beam divergence, 1/e² level full beam, far field	≤1 mrad
Beam quality factor M²	1.1
Beam circularity, far field	≥90 %
Polarization state	Linear, vertical, extinction ratio ≥20 dB

General Specifications

Power consumption	20 W max.
Supply voltage	5 V to 12 V
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
Weight (laser head)	≤250 g
Controler dimensions	109x84x30 mm
Compliance	CE (incl. IEC 60825-1) and FDA 21 CFR 1040.10 / 1040.11
Laser class	
Warranty	24 months or 10000 hours, whichever occurs first

Options

Single-mode fiber coupling
Multimode fiber coupling
Heat management
High rate modulation
Optical Isolator
OEM version

Oxxius has a policy of continuous product improvement. Specifications may change without notice.