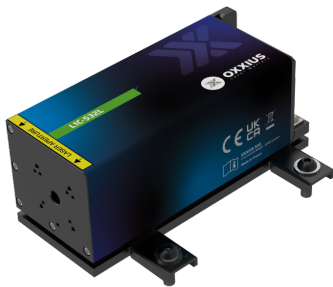


# FlexxRay

By Oxxius

|                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Product range</b> | CW & Modulated Lasers                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Product name</b>  | FlexxRay 532 nm (adjustable power)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Reference</b>     | LCX-532L (adjustable power)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Description</b>   | <p>The FlexxRay LBX-532 is a compact 532nm 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. <b>Key features</b></p> <ul style="list-style-type: none"> <li>• TEM<sub>00</sub> spatial mode</li> <li>• <math>\pm 1.0</math> % long-term power stability</li> <li>• User-adjustable optical power</li> <li>• Integrated control electronics Fully compatible with Oxxius MixxWave combiners for single-mode fiber delivery alongside other laser lines.</li> </ul> |



## Product Variations

| Part Number           | Power  |
|-----------------------|--------|
| LCX-532L-50-CSB-PPA   | 50 mW  |
| LCX-532L-100-CSB-PPA  | 100 mW |
| LCX-532L-150-CSB-PPA  | 150 mW |
| LCX-532L-200-CSB-PPA  | 200 mW |
| L1C-532L-300-CSB-MPA  | 300 mW |
| L1C+-532L-500-CSB-MPA | 500 mW |
| L1C+-532L-800-CSB-MPA | 800 mW |

## Optical Characteristics

|                                                                          |                                                                                 |
|--------------------------------------------------------------------------|---------------------------------------------------------------------------------|
| <b>Emission wavelength</b>                                               | 532 nm                                                                          |
| <b>Tolerance</b>                                                         | (±0.3 nm tolerance)                                                             |
| <b>Power stability over 8 hours, temperature within ±3°C</b>             | ±1.0 %                                                                          |
| <b>Control modes</b>                                                     | Automated power control, fixed or adjustable power level                        |
| <b>Optical noise</b>                                                     | ≤0.2 % rms (up to 300 mW) ≤0.5 % rms (500 mW and above), 10 Hz-20 MHz bandwidth |
| <b>Spectral linewidth</b>                                                | ≤0.1 nm                                                                         |
| <b>Beam diameter, 1/e<sup>2</sup> level, 50mm from the beam aperture</b> | 0.7 ±0.15 mm                                                                    |
| <b>Beam divergence, 1/e<sup>2</sup> level full beam, far field</b>       | ≤1.4 mrad                                                                       |
| <b>Beam quality factor M<sup>2</sup></b>                                 | 1.1                                                                             |
| <b>Beam circularity, far field</b>                                       | ≥90%                                                                            |
| <b>Polarization state</b>                                                | Linear, vertical, extinction ratio ≥20 dB                                       |

## General Specifications

|                                         |                                                                                                                                                                            |
|-----------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Power consumption</b>                | 20 W max.                                                                                                                                                                  |
| <b>Supply voltage</b>                   | 5V to 12V (up to 200mW) 7 V to 12 V (300 mW and above)                                                                                                                     |
| <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>                     | ≤10 minutes                                                                                                                                                                |
| <b>Interfaces</b>                       | USB, RS-232                                                                                                                                                                |
| <b>Dimensions (laser head)</b>          | 100x40x32 mm (up to 200 mW) 154x62x64 mm (300 mW) 208x62x64 mm (500 mW and above)                                                                                          |
| <b>Weight (laser head)</b>              | ≤250 g (up to 200 mW) ≤1150 g (300 mW) ≤1250 g (500 mW and above)                                                                                                          |
| <b>Controler dimensions</b>             | 109x84x30 mm                                                                                                                                                               |
| <b>Compliance</b>                       | CE (incl. IEC 60825-1) and FDA 21 CFR 1040.10 / 1040.11                                                                                                                    |
| <b>Laser class</b>                      |   |
| <b>Warranty</b>                         | 24 months or 10000 hours, whichever occurs first                                                                                                                           |

# Options

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

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