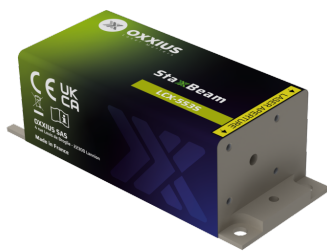


<b>Gamme</b>	Single Frequency Lasers
<b>Title</b>	StaxxBeam 553 nm (adjustable power)
<b>Reference</b>	L1C-553S (adjustable power)
<b>Description</b>	<p>The StaxxBeam 553 is a compact and powerful 553 nm laser source that delivers a narrow linewidth emission and a spectrum of outstanding purity. Its robust design, complete with readily available safety features makes it well-suited for both laboratory and industrial use.</p> <p>Its proven performance, stability, and versatility make it a trusted solution for laser Doppler anemometry, interferometry, structured illumination microscopy.</p> <p>Key features</p> <ul style="list-style-type: none"> <li>• Single frequency emission, <math>\leq 1</math> MHz linewidth</li> <li>• <math>\leq 1</math> pm wavelength stability</li> <li>• 0%-100% user-adjustable power</li> <li>• TEM<sub>00</sub> spatial mode</li> <li>• <math>\pm 1.0\%</math> long-term power stability; low optical noise</li> <li>• Integrated control electronics</li> </ul> <p>Fully compatible with Oxxius' AOM option, or with MixxWave combiners, in combination with other laser lines.</p>



## Product Variations

Part Number	Puissance
L1C-553S-50-CSB-MPA	200mW
L1C-553S-100-CSB-MPA	100mW
L1C-553S-200-CSB-MPA	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>	≤ 1nm
<b>Wavelength stability over 8 hours, temperature within ±3°C</b>	≤ 1pm
<b>Wavelength drift over consecutive on/off cycles, temperature within ±3°C</b>	≤ 1pm
<b>Coherence length</b>	≥ 100 m
<b>Side mode suppression ratio, +/- 0.5nm from the main peak</b>	≥ 30 dB
<b>Side mode suppression ratio, +/- 5nm from the main peak</b>	≥ 60 dB typ.
<b>Beam diameter, 1/e<sup>2</sup> level, 50mm from the beam aperture</b>	0.7 ±0.1mm (±0.15mm for 200mW)
<b>Beam divergence, 1/e<sup>2</sup> level full beam, far field</b>	≤ 1mrad
<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 ≥ 20dB

## General Specifications

<b>Power consumption</b>	20 W max.
<b>Supply voltage</b>	7V 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>	≤10 minutes
<b>Interfaces</b>	USB, RS-232, direct modulation inputs
<b>Dimensions (laser head)</b>	120x40x32 mm
<b>Weight (laser head)</b>	≤1150 g
<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>	3B
<b>Warranty</b>	24 months or 10000 hours, whichever occurs first

## Options

<b>Option 1</b>	Single-mode fiber coupling
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<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