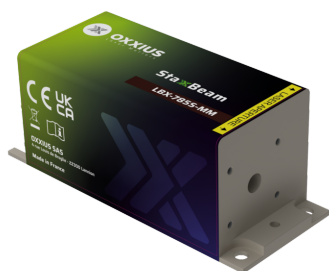


Gamme	Single Frequency Lasers
Title	StaxxBeam 785 nm (adjustable power)
Reference	LBX-785S (adjustable power)
Description	The StaxxBeam 785 is a compact and powerful 785 nm laser source that delivers an powerful, narrow linewidth emission over a multimode beam. Its robust design, complete with readily available safety features makes it well-suited for both laboratory and industrial use. Its proven performance, stability, and versatility make it a trusted solution for laser Raman spectroscopy. Key features • Single frequency emission, ≈ 100 MHz linewidth • ≈ 10 pm wavelength stability • $\pm 1.0\%$ long-term power stability; low optical noise • Integrated control electronics Fully compatible with MixxWave combiners, in combination with other laser lines.



Product Variations

Part Number	Puissance
LBX-785S-500-MM-PPA	500mW

Optical Characteristics

Emission wavelength	785 nm
Tolerance	(0.5nm tolerance)
Control modes	Automated current control
Optical noise	$\approx 0.2\%$ rms, 10Hz-20MHz bandwidth
Spectral linewidth	0.07nm
Wavelength stability over 8 hours, temperature within $\pm 3^{\circ}\text{C}$	≈ 10 pm
Wavelength drift over consecutive on/off cycles, temperature within $\pm 3^{\circ}\text{C}$	≈ 10 pm
Coherence length	n/a
Side mode suppression ratio, ± 0.5 nm from the main peak	≈ 30 dB
Beam diameter, $1/e^2$ level, 50mm from the beam aperture	N/A
Beam divergence, $1/e^2$ level full beam, far field	N/A

Beam quality factor M^2	N/A
Beam circularity, far field	? 90%
Polarization state	N/A

General Specifications

Power consumption	4 W typ. / 10 W max.
Supply voltage	5V to 12V
Operating temperature	20°C to 35°C
Storage temperature and humidity	0°C to 60°C
Warm up time	?2 minutes
Interfaces	USB, RS-232, direct modulation inputs
Dimensions (laser head)	100x40x40 mm
Weight (laser head)	?330 g
Controler dimensions	106x126x56 mm
Compliance	CE (incl. IEC 60825-1) and FDA 21 CFR 1040.10 / 1040.11
Laser class	4
Warranty	24 months or 5000 hours, whichever occurs first

Options

Option 1	Heat management
Option 2	OEM version