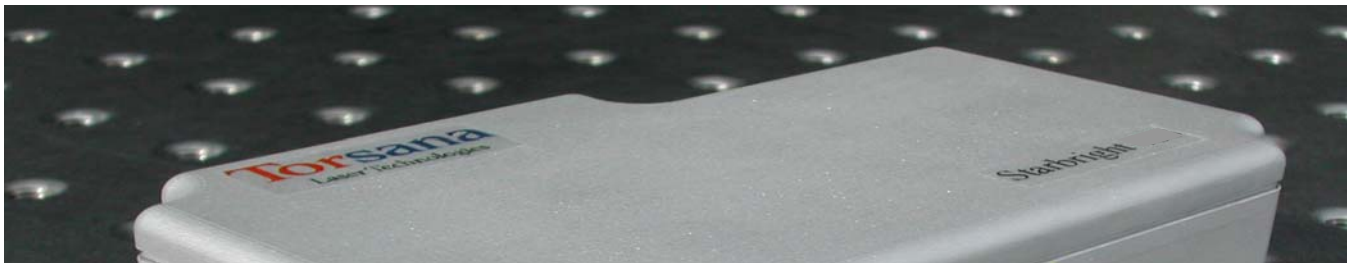
Starbright 785L



Ultra high resolution and minimum ASE

The Starbright lasers are based on a novel proprietary feedback technology for broad-area emitting diode lasers, delivering ideal specifications for analytical purposes.

The StarBright 785 L is designed specifically for Raman microscopy with a lower power requirement, and is equally suited for interferometry, Lidar and for frequency doubling.

Flawless stability in wavelength and output power

The spectral linwidth of the Starbright laser is very narrow, leading to an excellent beam quality which provides ultra high spatial and spectral resolution. Excellent ASE repression ensures collection of spectra very close to the laser line with very weak peaks. The laser is completely consistent in terms of wavelength and output power, even under the influence of strong ambient temperature changes.

Output power (CW)	120 mW
Wavelength	785 nm ± 0.3 nm
Linewidth	≈ 10 – 15 MHz single-frequency, < 3.5 x 10^{-4} cm^{-1}, 2 x 10^{-6} nm
Wavelength stability	≈ 20 pm/100hr ambient temperature from 20 – 30 °C
Beam size	0.7 mm
Beam pointing stability	40 µrad (15 – 35 °C)
Long term power stability	< 2% over 2 hrs
Power noise, rms (20 Hz – 2 MHz)	< 0.5 %
Power noise, peak - peak (20 Hz – 20 KHz)	< 1.5 %
Polarization	1:100
Beam quality	M^2 < 1.7
Beam Divergence (full angle)	2.9 mrad
Warm up time from Off	< 10 min
Warm up time from stand by	< 30 sec
Ambient temperature range	20 – 30 °C
Expected lifetime	> 30.000 hours
Power consumption	Max. 8A / 40 Watt
Physical dimensions, laser head without isolator	124 x 73.5 x 44 mm (L x W x H)
Alignment tolerances: Beam position / Beam angle	± 0.7 mm / ± 0.7 mrad
Controller requirement	4 W

The laser is available with single mode fiber coupling and coupling to larger diameter fibers. It includes the compact and versatile Starbright laser controller and a high-quality optical Faraday isolator to prevent optical feed back damage.

Specifications are subject to change without notice.

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