

509nm (1U)

NARROW-LINEWIDTH CW LASERS



509nm (1U) Based on high-power, low-noise ytterbium-doped fiber amplification and frequency doubling technology, a compact, narrow-linewidth laser with a wavelength of 509nm is achieved. This laser delivers high-performance laser beams via a single-mode polarization-maintaining fiber.

- Narrow Linewidth Low Intensity
- Noise High Power Excellent
- Beam Quality Never Mode
- Resistant to High and
- Low Temperature and Vibration
- Working Environment
- Optical Lattices
- Atomic Cooling and Trapping

Specifications

Parameter	FL-SF-X-Y-CW
Common Wavelengths	509nm
Operation Mode	CW
Output Power	>0.5W
Tuning Range (Temperature)	>0.35nm, Continuous without mode hop
Output Mode	Single-mode polarization-maintaining fiber output with FC/APC connectors
Linewidth (100us integration time)	<20kHz
Polarization Extinction Ratio	>20dB
Power Stability (3 Hours RMS)	<0.75%
Beam Quality	M2<1.1
PZT Fast Tuning Range	>3GHz
PZT Fast Tuning Bandwidth	>5kHz
AOM Tuning Bandwidth (Option)	>500kHz
AOM Tuning Range (Option)	>±5MHz
RIN Relative Intensity Noise (10Hz-100MHz, RMS)	<0.06%
Cooling	Air Cooling
Temperature	15-30°C (Air Cooling)
Communication	RS422
Power Supply	100-240V, 50/60Hz

Source: WaveQuanta product database. For ordering, customization (wavelength, power, package) and quotation, contact sales@wavequanta.com.