

Skylark NX

Single frequency CW C-DPSS
UV - NIR lasers

Key features



Ultra-narrow linewidth
< 0.5 MHz



Ultra-stable wavelength
< 0.2 pm over 8 hours



Ultra-stable power output
< 2% over 8 hours



Ultra-low power noise
< 0.1 % RMS (10 Hz - 10 MHz)



Integrated design
Easy to install

Skylark NX lasers deliver ultra-stable single frequency continuous wave performance from a compact diode-pumped solid-state (C-DPSS) platform.

Our integrated monolithic design enables the production of the highest output power on a small footprint — combining the superior optical properties of solid-state lasers with the small form-factor, high-efficiency operation of diode lasers.

Outstanding beam characteristics, high output stability, and extremely low noise make Skylark NX lasers perfect for demanding and emerging applications in Raman spectroscopy, holography, photoluminescence, lithography, flow cytometry, and quantum technology development.

Integration features

- Plug-in USB connectivity
- Versatile control software
- Integrated heatsink
- Remote diagnostics

Options and accessories

- Closed-loop water cooling
- Power tuning and modulation
- Fiber coupling
- Maintenance and service packages

Skylark 320

Skylark 349

Skylark 532

Skylark 640

Skylark 780

Output beam parameters

Output power	up to 200 mW		up to 2,000 mW		up to 1,500 mW	up to 200 mW
Wavelength	320 nm	349 nm	532 nm	640 nm	780 nm	
Spectral bandwidth	≤ 0.5 MHz				≤ 0.2 MHz	
Spatial mode	TEM00					
Spectral stability	± 0.2 pm (over 8 hour operation)					
Coherence length	> 100 m				> 200 m	
Output power stability	≤ 2.0 % (over 8 hour operation)			≤ 1.0 % (over 8 hour operation)		
Output power noise	≤ 0.1 % RMS (10 Hz – 10 MHz)					
Beam divergence	1.0 mrad, diffraction limited					
Beam diameter at output aperture	0.6 - 1.2 mm		0.7 - 1.1 mm		0.8 - 1.2 mm	
Beam pointing stability	≤ 5 μrad/°C					

Laser head dimensions

L x W x H	240 x 150 x 100 mm		210 x 100 x 80 mm		170 x 95 x 75 mm	
Beam height	65 mm					

Environmental conditions

Ambient temperature range	18 - 30 °C					
Laser head interface stability	± 1.5 °C					
Storage	0 - 50 °C					
Humidity	0 - 50 %, non-condensing					

