

Skylark 640 NX

Single frequency CW C-DPSS
VIS laser

The Skylark 640 NX laser offers C-DPSS CW single frequency operation, delivering up to 1,500 mW of unrivalled ultra-stable output power and wavelength from a compact footprint. The Skylark 640 NX is designed for precision applications with excellent spectral purity and extremely low noise.

Key features



Ultra-narrow linewidth
< 0.5 MHz



High spectral stability
< 1 pm over 8 hours



High power stability
< 2% over 8 hours



Integrated design
Easy to install

Applications

Holography, holographic imaging, holographic art, holographic interferometry, holography research, Raman spectroscopy, fluorescence, metrology, flow cytometry, brillouin scattering, interferometry, optical manipulation, and more.

Specifications

Output beam parameters

Output power	up to 1,500 mW
Wavelength	640 nm
Spectral bandwidth	≤ 0.5 MHz
Spatial mode	TEM00
Spectral stability	± 0.2 pm (over 8 hour operation)
Coherence length	> 100 m
Output power stability	≤ 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	0.8 - 1.2 mm
Beam pointing stability	≤ 5 μrad/°C

Laser head dimensions

L x W	170 x 95 mm
Beam height	51.7 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
Laser head	Hermetically sealed

Integration features

Plug-in USB Connectivity	Combined Heatsink
Versatile Control Software	Remote Diagnostic Support

Optional accessories

Heatsink	Fan-assisted air cooled or, Water-cooled thermoelectric chiller
External manual power control	0 - 100 %, continuous

Warranty

12 month warranty	For laser head and controller
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