

# Skylark 640

Single frequency CW C-DPSS  
VIS laser

The Skylark 640 laser delivers unrivalled continuous wave single frequency performance at market-leading output powers from a compact footprint. The 640 NX provides ultra-stable output and outstanding beam characteristics over a long coherence.

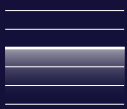
## Key features



**Ultra-narrow linewidth**  
< 0.5 MHz



**High spectral stability**  
< 1 pm over 8 hours



**High power stability**  
< 1% 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 x H	210 x 100 x 80 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
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
-------------------	-------------------------------