

# SKYLARK 785 NX

SINGLE FREQUENCY CW DPSS NIR LASER

The Skylark 785 NX CW DPSS laser delivers ultra-stable, narrow linewidth output with low noise and a pure TEM<sub>00</sub> beam, ensuring high resolution, high contrast Raman spectra.

Long-term reliability enables consistent, reproducible results for advanced Raman techniques.



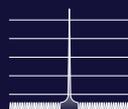
## Key features



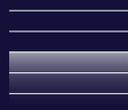
**Ultra-narrow linewidth**  
 $\leq 300$  kHz



**Ultra-low power noise**  
 $\leq 0.3$  % RMS (10 Hz - 10 MHz)



**Ultra-low ASE noise**  
 $< -80$  dB



**Ultra-stable power output**  
 $\leq 2.0$  % over 8 hours

## Applications

Raman spectroscopy, resonant Raman, micro-Raman, surface enhanced Raman (SERS), Raman mapping, cryo-Raman, hot-stage Raman, 2D material analysis, semiconductor material analysis, confocal microscopy, metrology, free-space optical communication.

## Get in touch

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**Reveal** the unseen,  
**detect** the imperceptible,  
**measure** the unknown.



## Specifications

### Output beam parameters

Output power	up to 400 mW
Wavelength	785 nm
Spectral bandwidth	$\leq 300$ kHz
Spatial mode	TEM <sub>00</sub>
Spectral stability	$\pm 0.2$ pm (over 8 hour operation)
Coherence length	$> 100$ m
Output power stability	$\leq 2.0$ % (over 8 hour operation)
Output power noise	$\leq 0.3$ % RMS (10 Hz - 10 MHz)
ASE noise	$< -80$ dB
Beam divergence	1.0 mrad, diffraction limited
Beam diameter at output aperture	0.8 - 1.2 mm
Beam pointing stability	$\leq 5$ $\mu$ rad/ $^{\circ}$ C

### Environmental conditions

Ambient temperature range	18 - 30 $^{\circ}$ C
Laser head interface stability	$\pm 1.5$ $^{\circ}$ C
Storage	0 - 50 $^{\circ}$ C
Humidity	0 - 50 %, non-condensing

### Dimensions

Laser head (L x W x H)	257 x 150 x 87 mm
Beam height	54.2 mm

