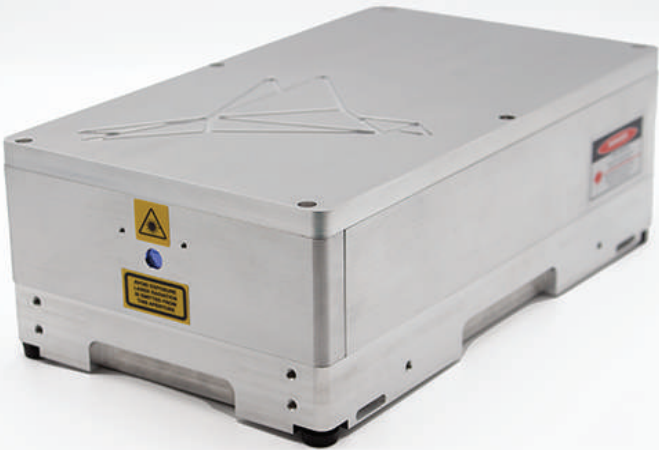


SKYLARK 320 NX

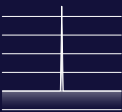
SINGLE FREQUENCY CW DPSS UV LASER

The Skylark 320 NX CW DPSS laser provides ultra-stable single frequency UV light at 320 nm for precision inspection, lithography, and manufacturing.

Engineered for consistent long-term performance, delivering up to 200 mW of ultra-stable output, low noise, and spectral purity.



Key features



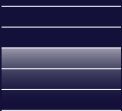
Ultra-narrow linewidth
 ≤ 500 kHz



Ultra-low power noise
 ≤ 0.3 % RMS (10 Hz - 10 MHz)



Ultra-stable wavelength
 ± 0.2 pm over 8 hours



Ultra-stable output power
 ≤ 2.0 % over 8 hours

Applications

UV Raman spectroscopy, semiconductor defect detection, wafer inspection, wide band gap materials characterisation, 2D materials, diffraction grating fabrication, optical grating mastering, laser interference lithography, laser interferometry, photoluminescence (PL), HeCd gas laser replacement.

Get in touch

 www.skylarklasers.com

 sales@skylarklasers.com

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



Specifications

Output beam parameters

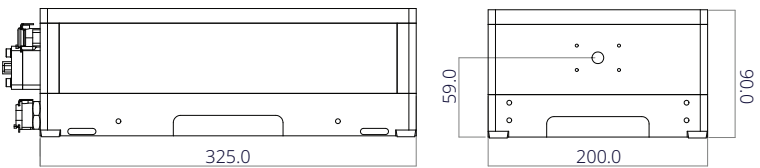
Output power	up to 200 mW
Wavelength	320 nm
Spectral bandwidth	≤ 500 kHz
Spatial mode	TEM ₀₀
Spectral stability	± 0.2 pm (over 8 hour operation)
Coherence length	> 100 m
Output power stability	≤ 2.0 % (over 8 hour operation)
Output power noise	≤ 0.3 % RMS (10 Hz – 10 MHz)
Beam divergence	1.0 mrad, diffraction limited
Beam diameter at output aperture	1.0 - 1.5 mm
Beam pointing stability	≤ 5 μ rad/°C

Environmental conditions

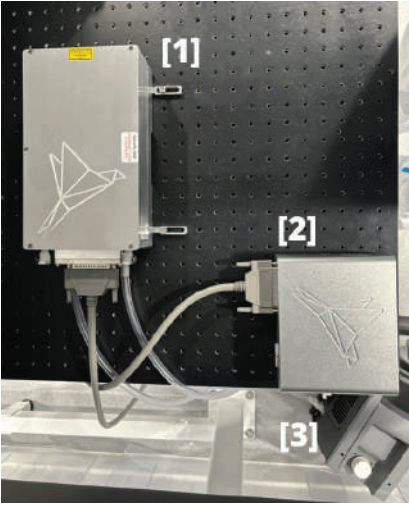
Ambient temperature range	18 - 30 °C
Laser head interface stability	± 1.5 °C
Storage	0 - 50 °C
Humidity	0 - 50 %, non-condensing

Dimensions

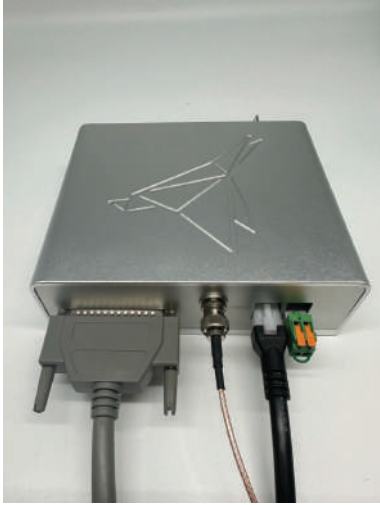
Laser head (L x W x H)	325 x 200 x 90 mm
Beam height	59.0 mm



Skylark NX system overview



Skylark 320 NX system overview:
[1] laser head, [2] controller,
[3] closed-loop thermoelectric chiller

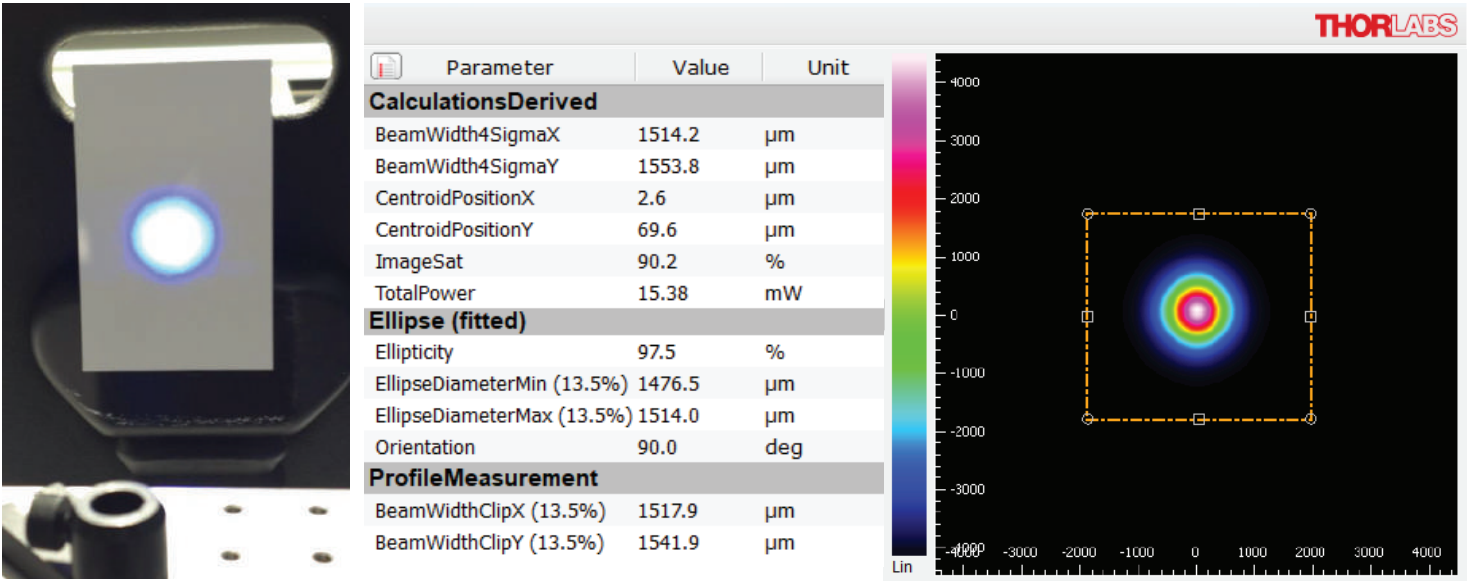


Skylark NX controller
back view + connector types



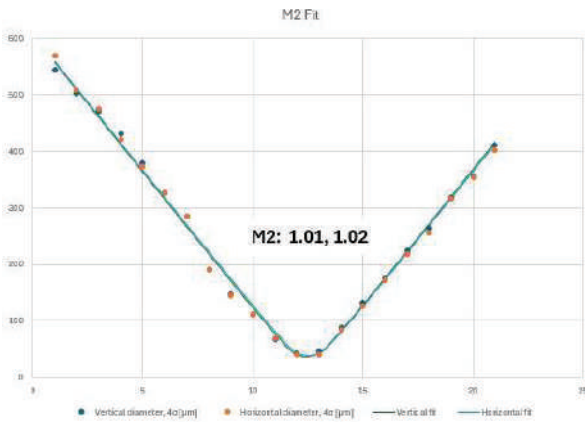
Skylark NX controller
front view

Beam profile

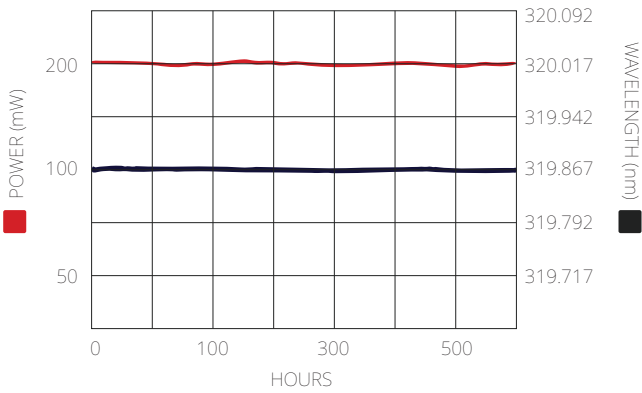


[1] Visual inspection of beam on detection card, [2] Beam profile, ellipticity > 97%

Test data



M² value < 1.03



320 NX power and wavelength stability over 500+ hours