



Skylark 320 NX
DPSS laser:
**KEY
ADVANTAGES**
over helium
cadmium
systems

High power
200 mW

Delivers up to 200 mW of efficient
ultraviolet light at 320 nm,
ensuring ample power margin
for complex setups.

Clean beam
 $M^2 < 1.2$

Operates with a pure TEM₀₀
mode with ellipticity > 96%,
delivering uniform spatial
quality and low noise operation.

Stable output
 $< 5 \mu\text{rad}/^\circ\text{C}$

Ensures beam alignment and
spectral precision for consistent
performance across demanding
optical applications.

Specifications	Skylark NX	HeCd
Output power	up to 200 mW	up to 50 mW
Wavelength	320 nm	325 nm
Spatial mode	TEM ₀₀	TEM ₀₀
Beam quality (M^2)	< 1.2	Not specified
Beam pointing stability	$\leq 5 \mu\text{rad}/^\circ\text{C}$	$\leq 25 \mu\text{rad}/^\circ\text{C}$
Spectral linewidth	0.0005 GHz	1.0 GHz
Coherence length	$> 100 \text{ m}$	0.3 m
Power noise (30 kHz – 10 MHz)	$\leq 0.1 \text{ \% RMS}$	$\leq 4.0 \text{ \% RMS}$
Power stability	$\leq 2.0 \text{ \% (8 hours)}$	$\leq 2.0 \text{ \% (4 hours)}$

**What do our customers say about Skylark 320 NX CW
DPSS single frequency lasers?**

“An excellent replacement for an
Argon or HeCd laser: emission is
spectrally pure, efficiency is much better,
it provides better longevity with cheaper
maintenance, and it is much smaller.”

SEMICONDUCTOR INSPECTION CUSTOMER

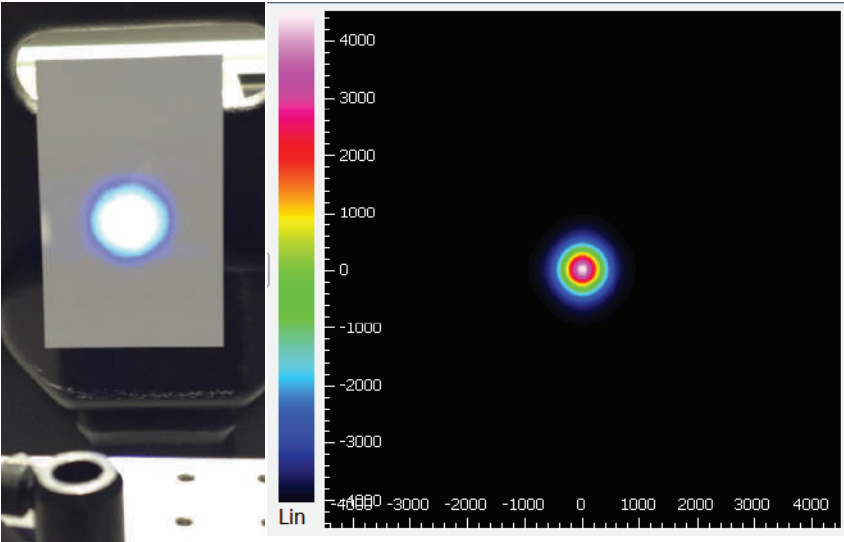
“It’s taken 15 years to find a suitable
replacement for our HeCd laser. The clean
mode enables us to manufacture high
fidelity gratings with > 92% transmission
efficiency (vs. 70% with HeCd)”

OPTICAL GRATING MANUFACTURER

“The Skylark 320 NX laser is an
excellent, efficient source for laser
interference lithography [techniques], a
great improvement over gas systems,
and with spectrally clean emission.”

SEMICONDUCTOR MATERIALS ANALYST

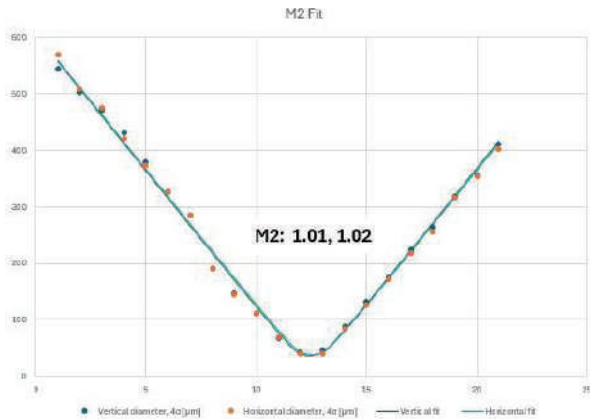
Beam profile



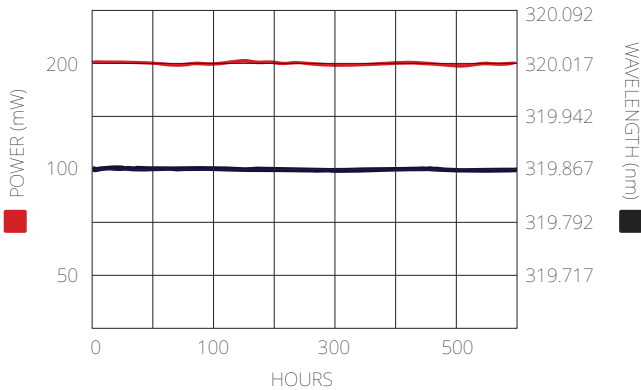
[1] Visual inspection of beam on detector card
[2] Beam profile via analyser

Ellipticity	96.8%
Minor ellipse diameter (13.5%)	1035.0 μm
Major ellipse diameter (13.5%)	1069.0 μm
Beam width (4-sigma) X	1074.4 μm
Beam width (4-sigma) Y	1108.5 μm
Beam width clip X (13.5%)	1037.1 μm
Beam width clip Y (13.5%)	1040.9 μm

Test data



Skylark 320 NX
M² value < 1.03



Skylark 320 NX
power and wavelength stability over 500+ hours

Dimensions



Get in touch

