

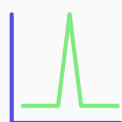
# 640

## Single frequency CW DPSS laser



Our 640 laser delivers unrivalled continuous-wave single frequency performance at market-leading output powers from a small footprint — making it suitable for integration with existing systems and a wide range of applications. The 640 provides outstanding beam characteristics, high output stability, extremely low noise, and a versatile software package.

### Key features



**Ultra-narrow linewidth**  
 $\leq 0.5$  MHz



**High power stability**  
 $\leq 2.0\%$  over 8 hours



**High spectral stability**  
 $\pm 1$  pm over 8 hours



**Excellent beam quality**

### Applications

Raman spectroscopy, Brillouin scattering, holography, flow cytometry, optical manipulation, semiconductor, imaging, metrology, interferometry ... and more

Specifications	
<b>Output beam parameters:</b>	
Output power	500, 750, or 1000 mW*
Wavelength	640 nm
Spectral bandwidth	$\leq 0.5$ MHz
Spatial mode	TEM <sub>00</sub>
Spectral stability	$\pm 1.0$ pm (over 8 hour operation)
Coherence length	$> 100$ m
Output power stability	$\leq 2.0\%$ (over 8 hour operation)
Output power noise	$\leq 0.1\%$ RMS (10 Hz – 10 MHz)
Beam divergence	$\leq 1$ mrad, diffraction limited
Beam diameter at output aperture	0.8 – 1.2 mm
Beam pointing stability	$\leq 5$ $\mu$ rad/°C
Polarisation ratio	$\geq 100:1$ , vertical
<b>Integration features:</b>	
Plug-in USB connectivity	Combined heatsink
Versatile control software	Remote diagnostic support
<b>Laser head dimensions:</b>	
L x W x H	210 x 100 x 100 mm
Beam height	65 mm
<b>Environmental conditions:</b>	
Ambient temperature range	18 – 30 °C
Laser head interface stability	$\pm 1.5$ °C
Storage	0 – 50 °C
Humidity	5 – 95%, non-condensing
<b>Optional accessories:</b>	
Heatsink	Fan-assisted
	Water-cooled with thermoelectric chiller
External power control module	0 – 100%, continuous
Tuning range, mode-hop free	25 – 50 GHz
Low power alignment beam mode	

\* Other output powers available on request

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## Contact

✉ [info@skylarklasers.com](mailto:info@skylarklasers.com)  
☎ +44 (0) 131 333 2200  
🌐 [skylarklasers.com](http://skylarklasers.com)

Designed &  
manufactured  
in the UK



AVOID EYE OR SKIN EXPOSURE TO  
DIRECT OR SCATTERED RADIATION  
**CLASS 4 LASER PRODUCT**  
MAX. POWER: 1000 mW  
(IEC 60825-1)