

Duetto 349

Single Frequency CW UV Laser



The Duetto 349 UV Series offers unrivalled CW single frequency operation within the UV range, offering 50 mW power with outstanding beam characteristics, high output stability, extremely low noise, small footprint, and versatile software package – making it suitable for a wide range of applications and system integrations.

KEY FEATURES



Ultra-narrow Linewidth
 ≤ 0.5 MHz



High Power Stability
 ≤ 2.0 % over 8 hours



High Spectral Stability
 ± 1 pm over 8 hours



Designed for Integration

APPLICATIONS

Semiconductor Inspection - Wafer Fabrication - Lithography - Confocal Microscopy - Raman Spectroscopy - Biomedical/Bioengineering - Flow Cytometry - Fluorescence - Disc Mastering - Diffraction Grating Mastering - High Precision Optics - and more.

Specifications

Output Beam Parameters:

Output Power	50 mW
Wavelength	349 nm
Spectral Bandwidth	≤ 0.5 MHz
Spatial Mode	TEM ₀₀
Spectral Stability	± 1.0 pm (over 8 hour operation)
Coherence Length	> 100 m
Output Power Stability	≤ 2.0 % (over 8 hour operation)
Output Power Noise	≤ 0.1 % RMS (10 Hz – 10 MHz)
Beam Divergence	≤ 2.5 mrad, diffraction limited
Beam Diameter at Output Aperture	0.6 – 1.2 mm
Beam Pointing Stability	≤ 5 μ rad/°C

Integration Features:

Plug-In USB Connectivity	Combined Heatsink
Versatile Control Software	Remote Diagnostic Support

Laser Head Dimensions:

L x W x H	222 x 110 x 105 mm
Beam Height	75 mm

Environmental Conditions:

Ambient Temperature Range	18 – 30 °C
Laser Head Interface Stability	± 1.5 °C
Storage	0 – 50 °C
Humidity	5 – 95 %, non-condensing
Laser Head	Hermetically sealed

Optional Accessories:

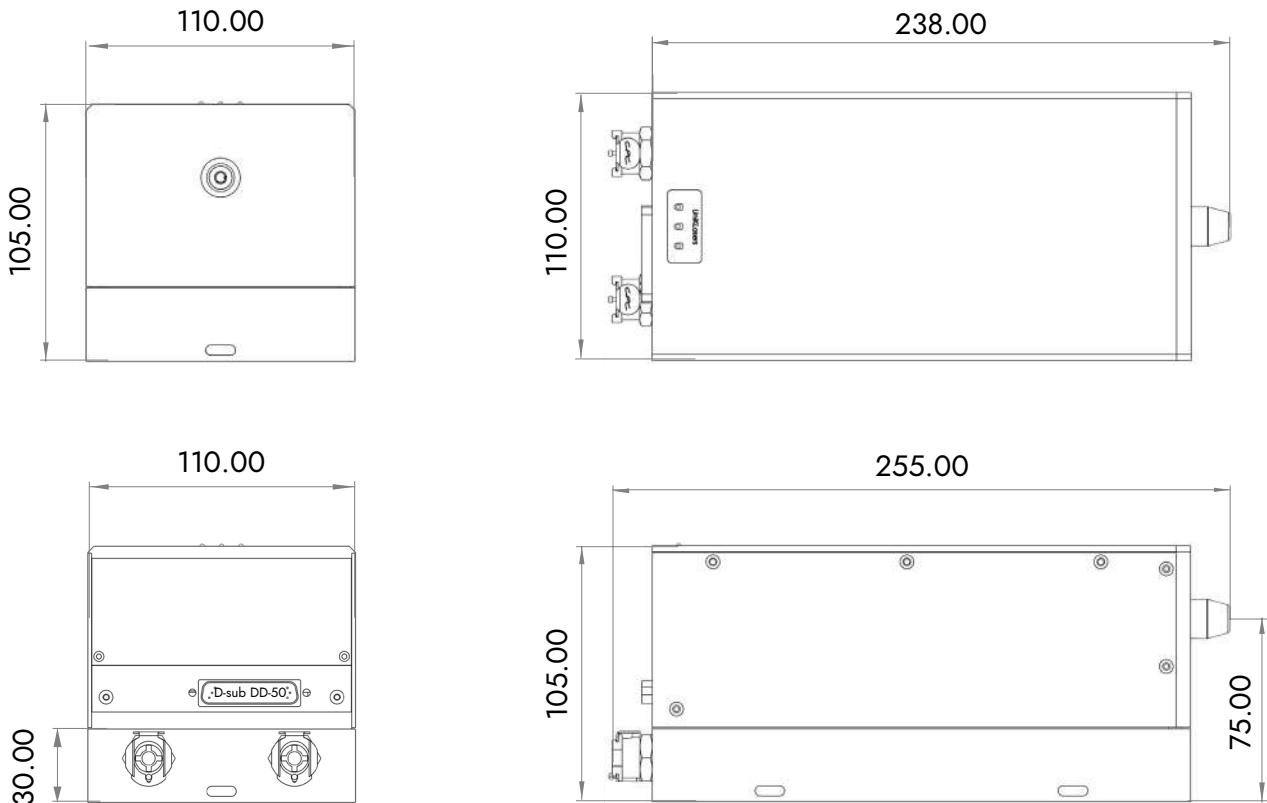
Heatsink	Fan-Assisted
	Water-Cooled with Thermoelectric Chiller
External Manual Power Control	0 – 100 %, continuous

Warranty:

12 Month Warranty	For laser head and controller
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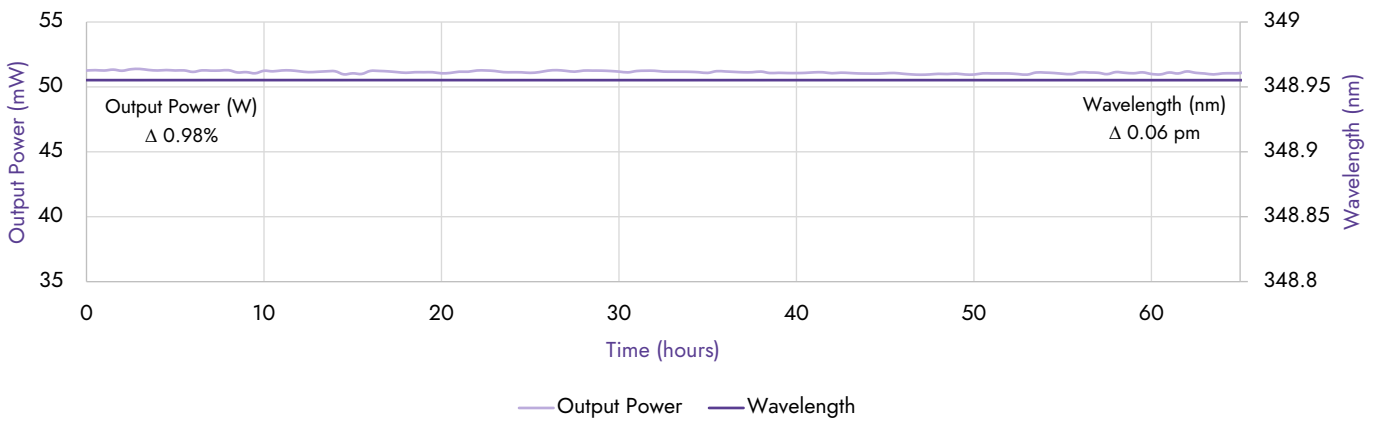
Laser and Heatsink Dimensions

255 x 110 x 105 mm



Performance Data

Longterm Wavelength and Power Stability



CONTACT US

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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)