



H-MODEL ULTRAVIOLET LASER

COMPACT, HIGH-POWER UV-A LASER MODULE

Compact, High-Power ultraviolet lasers are now commercially available from Daylight Solutions! Daylight has applied its high standards in design-for-reliability to provide multi-Watt output in the UV-A spectral region.

Continuous-wave (CW) power levels up to 4 Watts at ~405 nm and up to 1 Watt at ~375 nm are available from fiber-optic pigtailed packages. Fiber-optic delivery facilitates beam delivery and system integration while ensuring high reliability over extreme environmental conditions.

Daylight's ultraviolet laser modules provide best-in-class optical performance with Watt-level output that can be operated in both CW and pulsed modes. This flexibility enables their use in a variety of applications.

Daylight has leveraged its expertise in world-class lasers and opto-mechanical assemblies to provide rugged operational capability. The result is multi-Watt output in the UV-A from a compact, fiber-coupled package that can run from a standard laboratory power supply.

HIGHLIGHTS

- UV-A wavelengths at 375 nm and 405 nm
- High-power capability
- Compact footprint
- CW or pulsed output
- Fiber-optic pigtail output
- Ruggedized design

COMPACT, HIGH-POWER ULTRAVIOLET LASER

APPLICATIONS

- Chemical and biological detection
- Water purification
- Disinfection
- Skin treatment
- Fluorescence imaging
- UV curing
- Currency authentication
- Optical communications

SPECIFICATIONS

OPERATION MODE

Pulsed or CW

SPECIFICATIONS

Center Wavelength Availability	405 nm, 375 nm
Spatial Mode	Multimode (nominal)
Beam Divergence	< 7 mrad ¹ (full angle, 1/e ² intensity width)
Fiber Cable Core Diameter	50 μm
Fiber Cable Numerical Aperture	.22
Pulse Repetition Frequency	CW to 10 kHz
Rise/Fall Time (10-90%)	< 100 ns
Compliance Voltage	< 28 VDC
Operating Current	< 2 A
Dimensions (LxWxH)	5.3 x 4.8 x 3.2 cm
Operating Range (Case Temp)	0 - 50 °C

PERFORMANCE EXAMPLES

Center Wavelength (nm)	Optical Power (W)
405	4.0
375	1.0

¹ Custom far-field divergence possible; please inquire

Note: Free-space version available by request. Please inquire with factory.



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COMPLIES WITH 21 CFR 1040.10 AND 1040.11 EXCEPT FOR DEVIATIONS PURSUANT TO LASER NOTICE NO. 50, DATED JUNE 24, 2007. COMPLIES WITH IEC 60825-01

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