



# Azure NX 266-1000

## Next Generation High-Power CW Deep UV Laser

The Azure NX 266-1000 is the first high-power CW deep UV laser for use in demanding 24/7 commercial applications. Azure NX quadruples the UV power of its predecessor.

Based on a high-power Optically Pumped Semiconductor (OPS) green laser and using patented technology for single frequency operation and absolute wavelength control, the Azure NX laser utilizes the PermAlign™ mounting technique to ensure continuous reliable performance.

The system also features hands-free operation via LAN or WEB GUI. This high-power laser is ideal for applications such as semiconductor inspection allowing for detection of smaller defects in shorter times.

### FEATURES & BENEFITS

- Designed for 24/7 operation in commercial applications
- 1 W of ultra low noise CW 266 nm
- Complete hands-free operation
- Compact PermAlign design and hermetically sealed
- Patented single and absolute frequency stabilization

### APPLICATIONS

- Semiconductor Inspection
- Raman Spectroscopy
- Fiber Bragg Grating
- Lithography



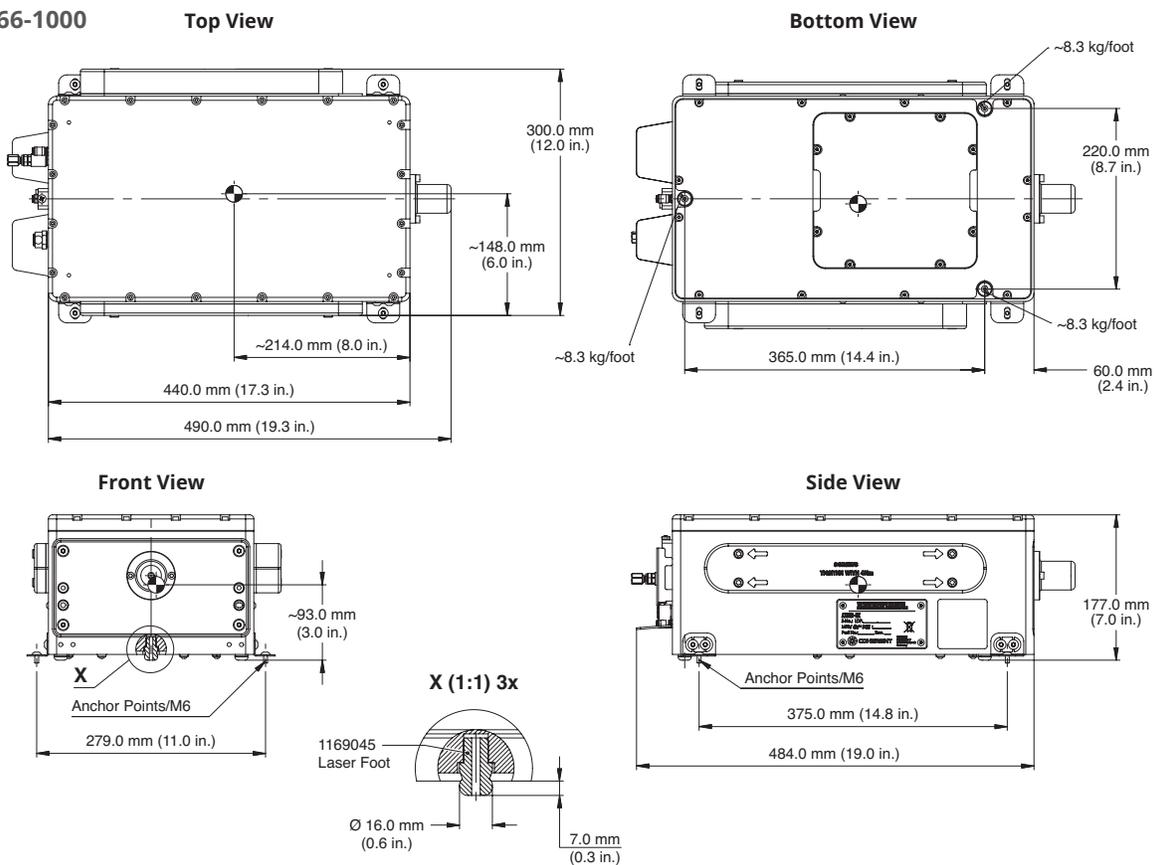
SPECIFICATIONS	Azure NX 266-1000
Power (W)	1
Wavelength (nm)	266
Linewidth (kHz)	<500
Beam Waist Diameter (mm)	2 ±0.3
Beam Waist Location Relative to Beam Exit (m)	Front bezel ±25% of Rayleigh Range
Beam Divergence (mrad) (full angle)	<0.3
Beam Ellipticity	0.9 to 1.1
Astigmatism	±25% of Rayleigh Range
Pointing Stability (μrad/°C)	<±5
Pointing (μrad) (actively stabilized)	<20
Transverse Mode	TEM <sub>00</sub>
M <sup>2</sup>	<1.3
Polarization	Linear, Vertical ±3°, 200:1
Output Power Stability over 8 hours (%)	<1
RMS Noise (%) (10 Hz to 500 MHz)	<0.5
PTP Noise (%) (100 s, 1 MHz to 100 MHz)	<3
WARM-UP TIME <sup>1</sup>	
Cold Start (hours)	<2
From Standby (minutes)	<30
From Crystal Shift (minutes)	<2
LIFE TIME	
FHG Crystal Spot Life Time (hours)	250
Number of FHG Crystal Spots	>30
DIMENSIONS & WEIGHTS	
Dimensions (L x W x H)	
Laser Head	225 x 177 x 483 mm <sup>3</sup> (8.86 x 6.97 x 19.02 in. <sup>3</sup> )
Power Supply	452 x 88 x 420 mm <sup>3</sup> (17.95 x 3.46 x 16.54 in. <sup>3</sup> )
Chiller	482 x 134 x 570 mm <sup>3</sup> (18.98 x 5.28 x 22.44 in. <sup>3</sup> )
Recirculator Unit	229 x 223 x 276 mm <sup>3</sup> (9.02 x 8.78 x 10.87 in. <sup>3</sup> )
Weight (kg)	
Laser Head	25
Power Supply	10
Chiller	20
Recirculator Unit	10
Laser Head Cable Length (m)	5
Operating Thermal Requirements	20 to 33°C
COOLING REQUIREMENTS	
Laser Head	Water-cooled, closed loop chiller for laser head
Power Supply	Air-cooled
Recirculator Unit	Water-cooled
Shipping Requirements	0 to 55°C in non-condensing environment
Orientation	Horizontal ±2°

<sup>1</sup> Defined as time to meet all specifications.

POWER CONSUMPTION		Azure NX 266-1000
Power Supply (kW)		0.6
Power Consumption (kW)		
Laser Head		1
Chiller		1
COMMUNICATION		
Interface/Protocol		Ethernet

## MECHANICAL SPECIFICATIONS

Azure NX 266-1000



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Coherent follows a policy of continuous product improvement. Specifications are subject to change without notice. Coherent's scientific and industrial lasers are certified to comply with the Federal Regulations (21 CFR Subchapter J) as administered by the Center for Devices and Radiological Health on all systems ordered for shipment after August 2, 1976.

Coherent offers a limited warranty for all Azure Lasers. For full details of this warranty coverage, please refer to the Service section at [www.Coherent.com](http://www.Coherent.com) or contact your local Sales or Service Representative. MC-XXX-18-0M0618 Copyright ©2018 Coherent, Inc.

