

# Talisker Ultra 1064-16

Picosecond Industrial Laser

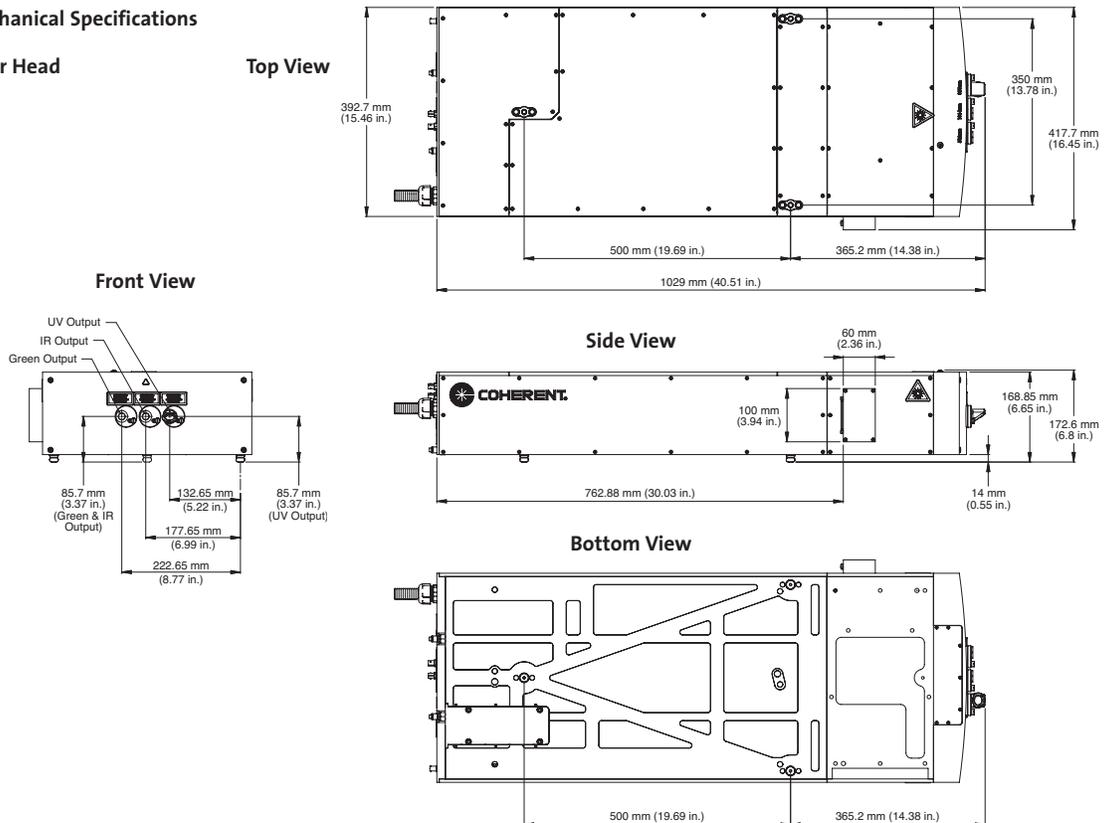


## Features

- Fiber free-space hybrid technology
- Excellent beam quality ( $M^2 < 1.3$ )
- Excellent pulse stability, no first pulse suppression required
- Shock, vibration, and thermal cycling tests for every laser
- Smart power supply with Ethernet, USB, and RS-232 control
- PermAlign™ solder-bonded optics technology
- Ultra-long-life AAA™ (Aluminum-free Active Area) laser diode material

## Mechanical Specifications

### Laser Head



Superior Reliability & Performance

# Talisker™ Ultra 1064-16

## Picosecond Industrial Laser

### System Specifications<sup>1</sup>

Output Wavelength (nm)	1064
Average Output Power (W)	>16
Repetition Rate Range (kHz)	
Operational <sup>2</sup>	Single-Shot to 200 with burst control
Optimized	200
Pulse Width (ps)	<15
Pulse-to-Pulse Stability (%) (rms 1 $\sigma$ )	<2
Average Power Stability (%) (over 8 hours)	<2
Polarization Ratio	>100:1 horizontal
Spatial Mode	TEM <sub>00</sub> (M <sup>2</sup> <1.3)
1/e <sup>2</sup> Beam Diameter (mm)	2.0 ±0.5
Beam Circularity (%)	>85
Warm-Up Time (typical)	<60 minutes from cold start
Bore-Sight Accuracy	
Lateral	<1 mm from window center
Angular	±5 mrad
Single-Phase Operating Voltage (VAC)	100 to 240 (auto ranging)
Laser Power Consumption	50 to 60 Hz (auto ranging) 1.3 kW maximum
Cooling Requirements	
Laser Head	Closed-loop water recirculator (water/air or water/water)
Power Supply	Air-cooled
Ambient Temperature Range (°C)	
Operating	15 to 30 (±1)
Non-Operating	-20 to 50
Relative Humidity (%)	10 to 80 (non-condensing)
Umbilical Length	3m (9.8 ft.)
Weight	
Laser Head	75 kg (165.3 lbs.)
Power Supply	30 kg (66.1 lbs.)

<sup>1</sup> All specifications at 200 kHz repetition rate.

<sup>2</sup> Using integrated AOM.

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 Talisker 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.



[www.Coherent.com](http://www.Coherent.com)

**Coherent, Inc.**  
5100 Patrick Henry Drive  
Santa Clara, CA 95054  
phone (800) 527-3786  
(408) 764-4983  
fax (408) 764-4646  
e-mail [tech.sales@Coherent.com](mailto:tech.sales@Coherent.com)

Benelux +31 (30) 280 6060  
China +86 (10) 8215 3600  
France +33 (0)1 8038 1000  
Germany +49 (6071) 968 333  
Italy +39 (02) 31 03 951  
Japan +81 (3) 5635 8700  
Korea +82 (2) 460 7900  
UK +44 (1353) 658 833

