



Talisker 1064-18

Picosecond Industrial Laser

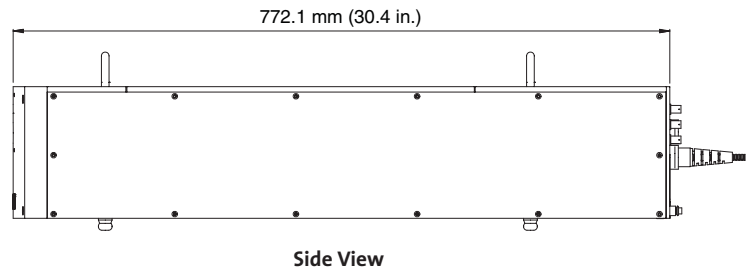
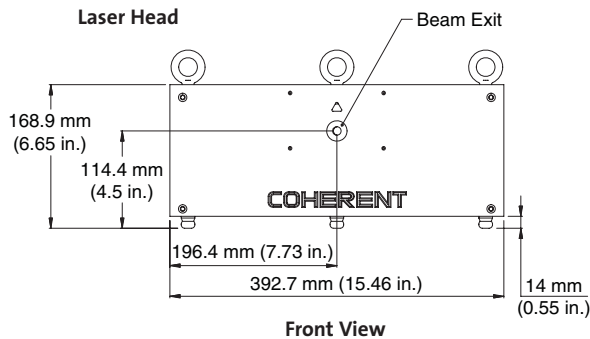


Features

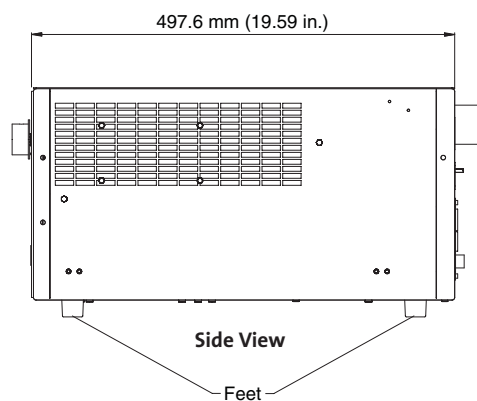
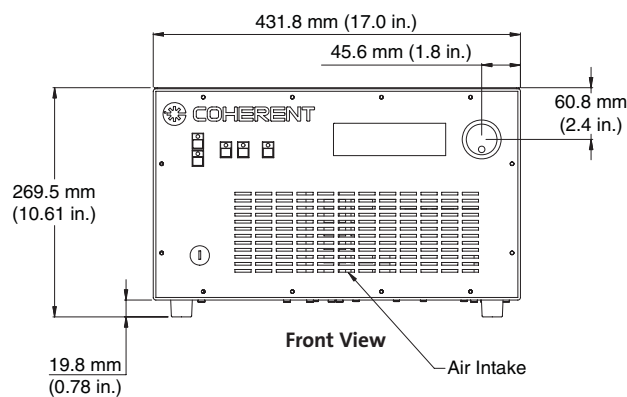
- High peak power picosecond pulses for high precision machining
- Fiber-based technology
- Industrial reliability
- Excellent beam quality ($M^2 < 1.3$)
- 18W average power at 1064 nm at 200 kHz
- Efficient menu-driven GUI or RS-232 interface
- PermAlign™ solder-bonded optics technology
- Ultra-long life AAA™ (Aluminum-free Active Area) laser diode material

Mechanical Specifications

Laser Head



Power Supply



Superior Reliability & Performance

Talisker™ 1064-18

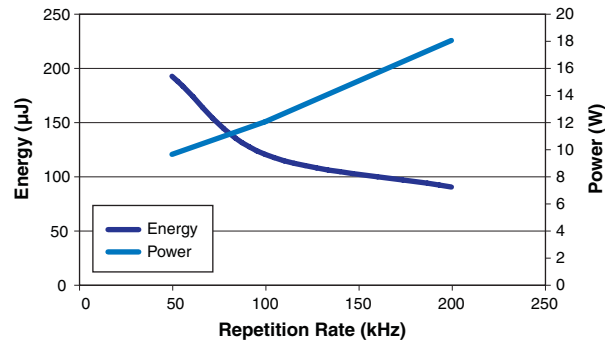
Picosecond Industrial Laser

System Specifications¹

Wavelength (nm)	1064
Repetition Rate Range (kHz)	
Operational	50 to 200
Optimized	200
Pulse Width (ps)	10 to 15
Pulse-to-Pulse Stability (rms 1σ)	<2%
Average Power Stability (over 8 hours)	<2%
Average Output Power (W)	>18
Polarization Ratio	>100:1 vertical
Spatial Mode	TEM ₀₀ (M ² <1.3)
1/e ² Beam Diameter (mm)	2 ±15%
Beam Circularity	>85%
Warm-Up Time (typical)	<15 minutes from standby mode <45 minutes from cold start
Bore-Sight Accuracy	±0.5 mm and ±5 mrad referenced to mounting features on laser head
Single-Phase Operating Voltage (VAC)	100 to 240
Laser Power Consumption	50 to 60 Hz 1.3 kW maximum
Cooling Requirements	
Laser Head	Closed-loop water recirculator
Power Supply	Air-cooled
Operational Ambient Temperature Range (°C)	15 to 30
Weight	
Laser Head	65 kg (143.3 lbs.)
Power Supply	30 kg (66.1 lbs.)
Umbilical Length	3 m (9.8 ft.)

¹ All specifications at 200 kHz repetition rate.

Typical Power Curve



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 or contact your local Sales or Service Representative.



Coherent, Inc.
5100 Patrick Henry Drive
Santa Clara, CA 95054
phone (800) 527-3786
(408) 764-4983
fax (800) 362-1170
(408) 988-6838
e-mail tech.sales@Coherent.com

Benelux +31 (30) 280 6060
China +86 (10) 6280 0209
France +33 (0)1 6985 5145
Germany +49 (6071) 968 333
Italy +39 (02) 34 530 214
Japan +81 (3) 5635 8700
Korea +82 (2) 460 7900
UK +44 (1353) 658 833

