



RLTMIL-1064 4-5W

- Solid State Laser System
- Infrared, 1064 nm
- Near TEM00 Transverse Mode
- Temperature-controlled
- CE certified
- 1 Year warranty



Description

RLTMIL-1064 is a series of temperature-stabilized (TEC) diode pumped solid state (DPSS) laser systems, emitting at a wavelength of 1064 nm, with an output power stability of <5%, and near TEM00 beam profile. It features a separate laser head and power supply unit, supporting a wide input voltage range of 85-264 VAC and safety interlock. Adjustable output power, modulation input and enhanced power stability of <3%, <2% and <1% are optional available.

RLTMIL-1064 is RoHS compliant, CE certified, and comes with a **1 year warranty**.

Electro-Optical Characteristics

T_{CASE} = 25°C

Parameter	Values	Unit
Wavelength	1064±1	nm
Output Power	4 – 5	W
Operating Mode	CW	
Transverse Mode	Near TEM00	
Power Stability (rms, over 4 hours)	< 5% (< 3%, < 2%, < 1%)*	
M ² factor	< 3.0	
Beam Diameter at aperture (1/e ²)	~ 3.0	mm
Beam Divergence (full angle)	< 1.5	mrad
Polarization Ratio	> 100:1	
Warm-up time	< 10	min
Pointing Stability (after warm-up)	< 0.05	mrad
Beam Height (from base plate)	68.4	mm
Operating Temperature	10 - 35	°C
Power Supply (85-264 VAC)	PSU-H-FDA (included)	
Expected Lifetime	10000	hours

* optional available





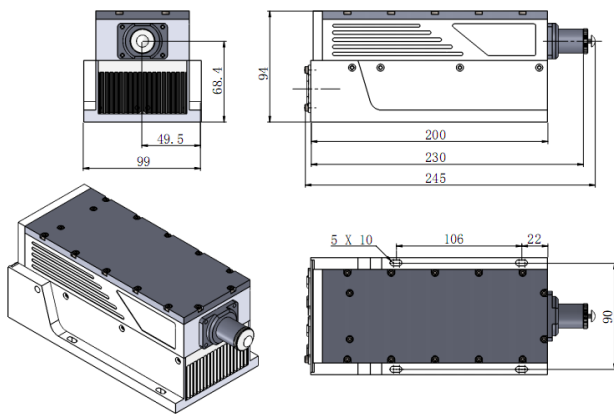
Options

Options	Description
PSU-H-LED	85-264 VAC power supply with current display and adjustable output power, frequency 1 Hz - 30 kHz (*)
RS-232	Remote interface for controlling the laser via software
Modulation Input	TTL or Analog input with <1 kHz, <10 kHz or <30 kHz
Multi-Mode Fiber Coupling	100, 200, 400, 600, or 1000µm multi-mode fiber with metal shielding and SMA905 or FC/PC connector
Fiber optic collimator	
Beam Expander Optic	2x, 3x, 5x, 10x
Line Generating Lens	Powel lens with 5°, 7°, 10°, 30°, 45°, 60°, 75°, or 90° fan angle
Shutter	Mechanical shutter (r/f time ~1.5ms, delay 5ms, exposure min 5ms)

* optional available

Outline Dimensions

Laser Head



245 x 99 x 94 mm³, 2.6 kg

PSU-H-FDA

fixed output power



275.5 x 145 x 106 mm³, 2.5 kg



Outline Dimensions

PSU-H-LED

adjustable output power



275.5 x 145 x 106 mm³, 2.5 kg

General Notes

- The laser head should be mounted on a flat, thermally dissipating surface and/or head sink to maintain a high-level of heat dissipation and reliability. Failure to comply with this procedure may cause permanent damage to the laser.
- Environmental temperature should be stable or only drift slowly within the allowed range of 10°C - 35°C. Abrupt changes in room temperature can affect the laser and deteriorate its performance and stability.
- The air duct must not be blocked, and it is required to have at least 5-10cm of free space for unobstructed air flow.
- If the laser system needs to be installed into equipment, please make sure there is sufficient airflow around the laser head. If necessary, additional fans may be used to help heat dissipation.

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