



RLTMDL-808 1-2500mW

- Diode Laser System
- 808 nm
- Temperature-controlled
- CE certified
- 1 Year warranty



Description

RLTMDL-808 is a series of temperature-stabilized (**TEC**) diode laser systems, emitting at a wavelength of typically **808 nm**, with a **multimode** beam profile and an output power stability of <3%. 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, higher power stability, fiber coupling and modulation input are optionally available.

RLTMDL-808 is RoHS compliant, CE certified, and comes with a **1 Year warranty**

Electro-Optical Characteristics (T_{CASE} = 25°C)

Parameter	Values	Unit
Wavelength	808 ±3	nm
Output Power	1 – 2500	mW
Operating Mode	CW	
Transverse Mode	Multimode	
Power Stability (rms, over 4 hours)	< 3% (< 2%, < 1%, < 0.5%)*	
Beam Diameter (at the aperture, 1/e ²)	~ 5x8	mm
Beam Divergence (full angle)	< 3.0	mrad
Warm-up time	< 5	min
Beam Height (from base plate)	24.8	mm
Operating Temperature	10 - 35	°C
Power Supply (100-240VAC)	PSU-FDA (included)	
Expected Lifetime	10000	hours

* optionally available





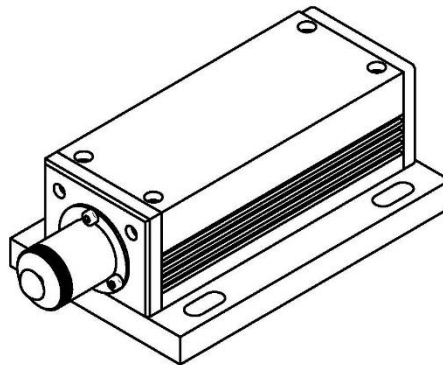
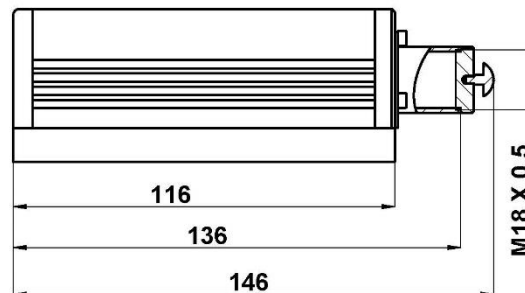
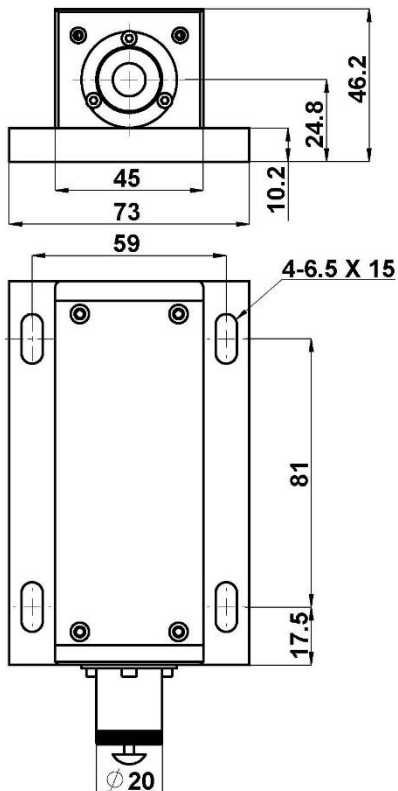
Options

Options	Description
Modulation Input	TTL or Analog input with <1 kHz, <10 kHz, <30 kHz, or <100 kHz (on request)
PSU-LED	85-264 VAC power supply with current display and adjustable output power, frequency 1 Hz - 30 kHz (*)
PSU-A-D	100-240 VAC digitally controlled power supply with LCD display, constant current and constant power mode operation, frequency 30 - 100 kHz (*)
RS-232	Remote interface for controlling the laser via software
Multimode Fiber Coupling	100, 200, 400, 600, or 1000µm multimode 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

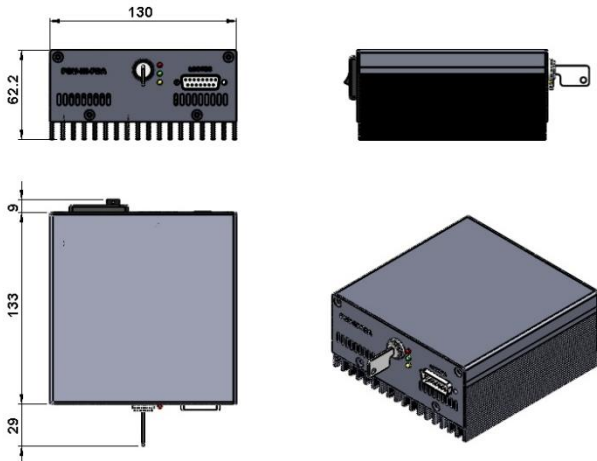


146 x 73 x 46.2 mm³, 0.7 kg



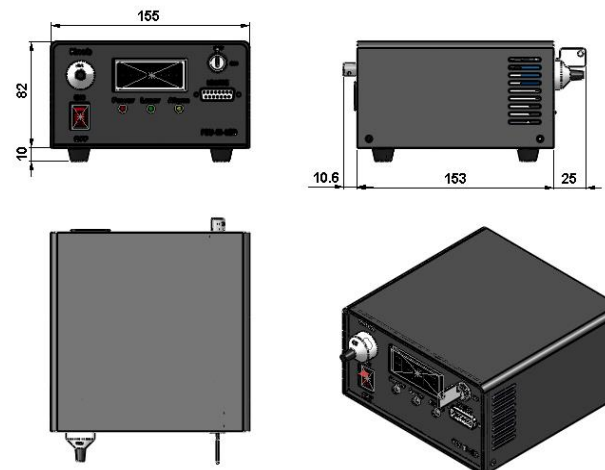
Outline Dimensions

PSU-FDA



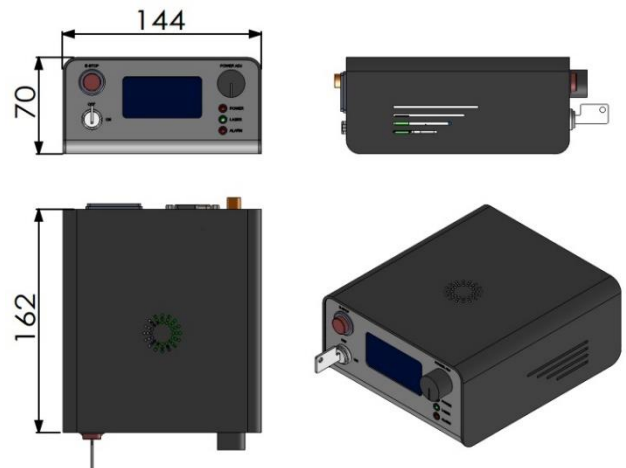
171 x 130 x 62.2 mm³, 1.2 kg

PSU-LED (adjustable output power)



188.6 x 155 x 92 mm³, 1.5 kg

PSU-A-D (adjustable output power)



162 x 144 x 70 mm³, 1.0 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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The above specifications are for reference purpose only and subjected to change without prior notice