



RLTMGL-532 1-300mW

- Green Solid-State Laser System
- 532 nm
- Temperature-controlled
- CE certified
- 1 Year warranty



Description

RLTMGL-532 is a series of low noise 532nm temperature-stabilized (**TEC**) diode pumped solid state (DPSS) laser systems, emitting at a wavelength of 532 nm, with **TEM₀₀ transverse**, and an output power stability of <5%. It features a separate laser head and power supply unit, supporting a wide input voltage range of 90-260 VAC and safety interlock.

Adjustable output power, fiber coupling, modulation input and enhanced power stability of down to <1% are available as optional features.

RLTMGL-532 is RoHS compliant, CE certified, and comes with a **1 year warranty**.

Electro-Optical Characteristics

T_{CASE} = 25°C

Parameter	Values	Unit
Wavelength	532±1	nm
Output Power	1 – 300	mW
Operating Mode	CW	
Transverse Mode	TEM ₀₀	
Power Stability (rms, over 4 hours)	< 3% , < 2%* , < 1%*	
M ² Factor	< 1.2, < 1.1*	
Beam Diameter at aperture (1/e ²)	~ 1.2	mm
Beam Divergence (full angle)	< 1.5	mrad
Polarization Ratio	> 100:1, Horizontal ±5 degree (Vertical*)	
Warm-up time	< 10	min
Pointing Stability (after warm-up)	< 0.05	mrad
Beam Height (from base plate)	24.8	mm
Operating Temperature	10 - 35	°C
Power Supply (85-264 VAC)	PSU-FDA (included)	
Expected Lifetime	10000	hours

* optional available





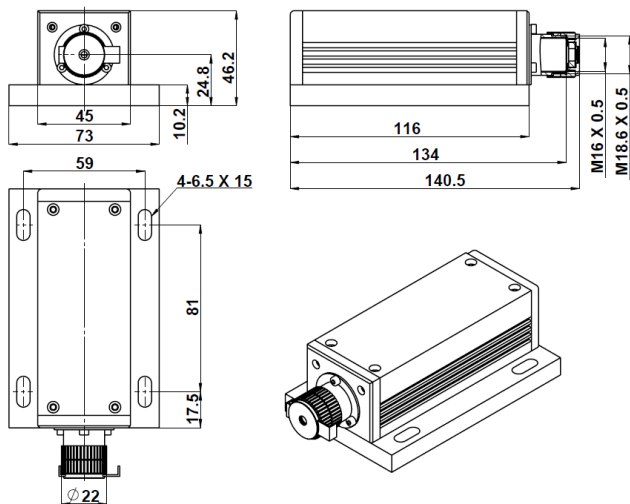
Options

Options	Description
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 (*)
PSU-OEM	5 VDC power supply for system integration
RS-232	Remote interface for controlling the laser via software
Modulation input	TTL or Analog input with <1 kHz, <10 kHz, <30 kHz, or <100 kHz (on request)
Multi-mode fiber coupling	50, 100, 200, 400, 600, or 1000 μm multi-mode fiber with metal shielding and SMA905 or FC/PC connector; (others on request)
Fiber optic collimator	Focusable beam at fiber end
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 ~1.5 ms, delay 5 ms, exposure min. 5 ms)

* optional available

Outline Dimensions

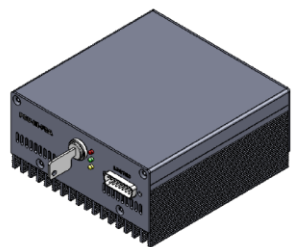
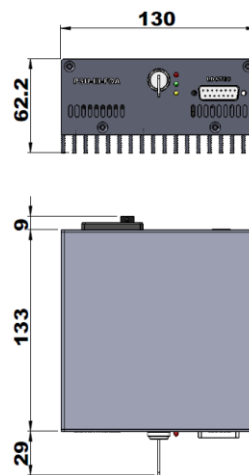
Laser Head



140.5 x 73 x 46.2 mm³, 0.6 kg

PSU-FDA

fixed output power



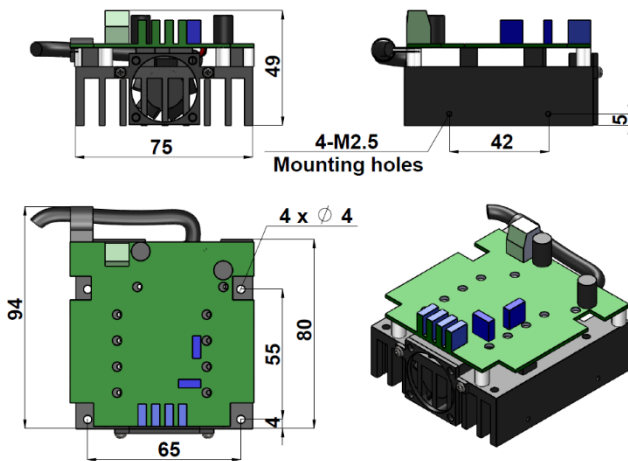
133 x 130 x 62.2 mm³, 1.2 kg



Outline Dimensions

PSU-OEM

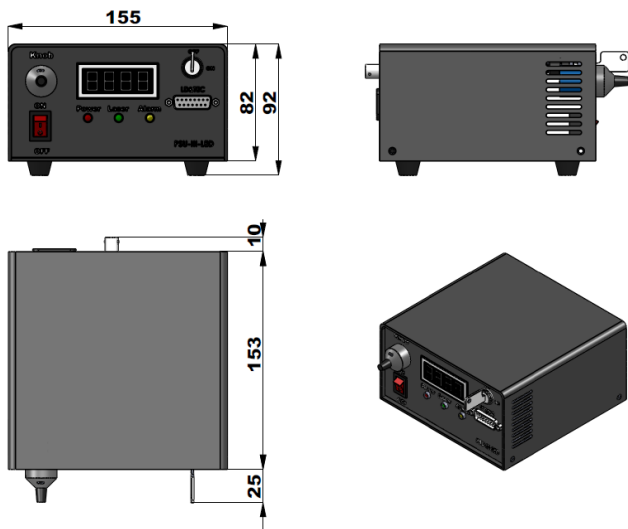
fixed output power



94 x 75 x 49 mm³, 0.23 kg

PSU-LED

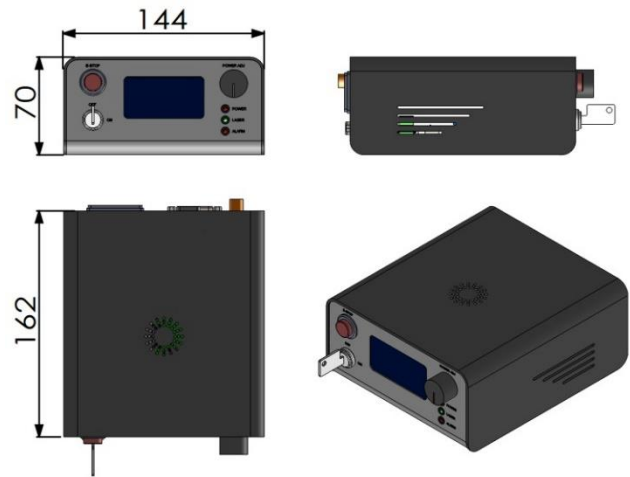
adjustable output power



153 x 155 x 92 mm³, 1.5 kg

PSU-A-D

adjustable output power, LCD



162 x 144 x 70 mm³, 1.0 kg



General Noes

- 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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