



RLTMGL-589 50-200mW

- Yellow Solid State Laser System
- 598 nm
- Temperature-controlled
- CE certified
- 1 Year warranty



Description

RLTMGL-589 is a series of yellow temperature-stabilized (**TEC**) diode pumped solid state (**DPSS**) laser systems, emitting at a wavelength of typically **589 nm**, with a **TEM₀₀** beam profile and an output power stability of <5%. It features a separate laser head and power supply unit, supporting a wide input voltage range of 100-240 VAC and safety interlock.

Adjustable output power, higher power stability, fiber coupling and modulation input are optionally available.

RLTMGL-589 is RoHS compliant, CE certified, and comes with a **1 Year warranty**

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

Parameter	Values	Unit
Wavelength	589 ±1	nm
Output Power	50 – 200	mW
Operating Mode	CW	
Transverse Mode	TEM ₀₀	
M ² Factor	< 2.0	
Power Stability (rms, over 4 hours)	< 5% (< 3%, < 2%, < 1%)*	
Beam Diameter (at the aperture, 1/e ²)	~3.0	mm
Beam Divergence (full angle)	< 2.0	mrad
Polarization Ratio	> 100:1	
Warm-up time	< 10	min
Pointing Stability (after warm-up)	<0.05	
Beam Height (from base plate)	45	mm
Operating Temperature	10 - 35	°C
Power Supply (100-240VAC)	PSU-FDA (included)	
Expected Lifetime	10000	hours

* optionally available



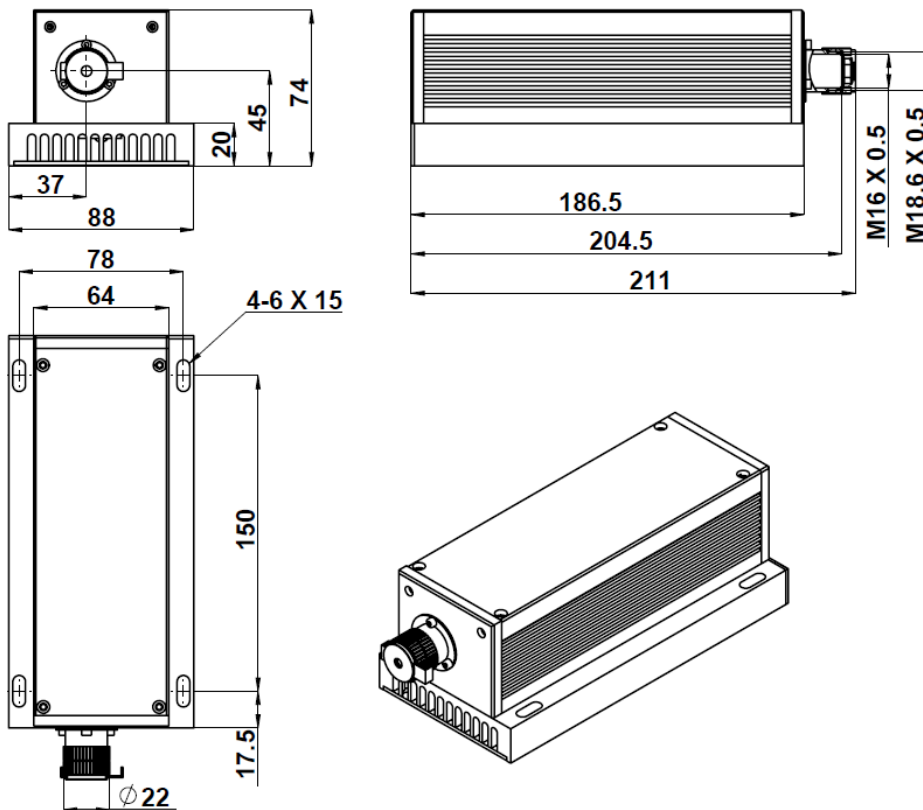


Options

Options	Description
Modulation Input	TTL or Analog input with <1kHz, <10kHz, <30kHz (on request)
PSU-LED	90-260 VAC power supply with current display and adjustable output power
PSU-SR	100-240 VAC digitally controlled power supply with two-line LCD display, constant current and constant power mode operation
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	Powell 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)

Outline Dimensions

Laser head

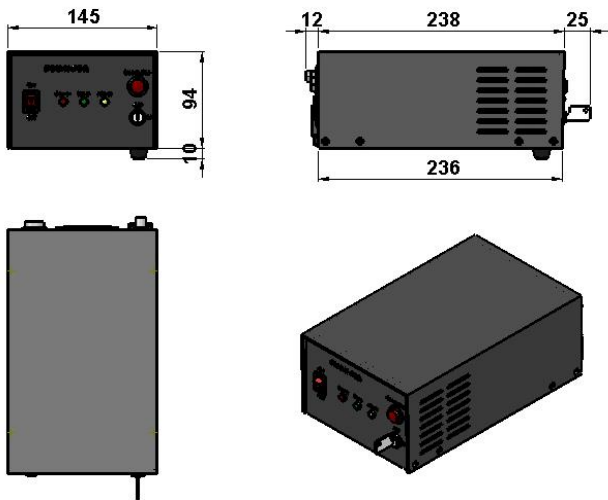


211 x 88 x 74 mm³, 1.6 kg



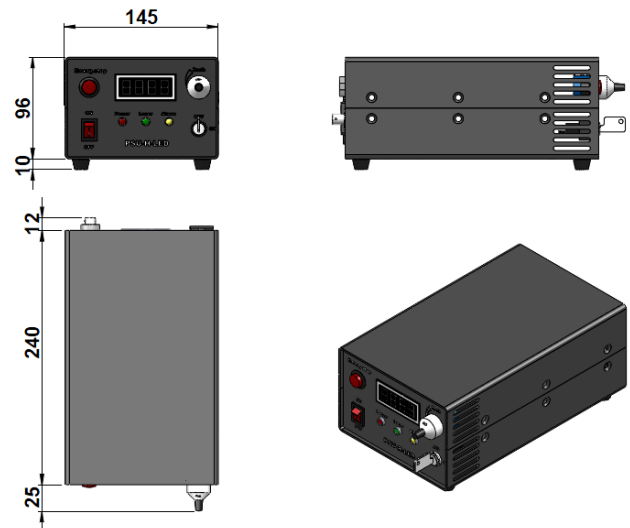
Outline Dimensions

PSU-FDA



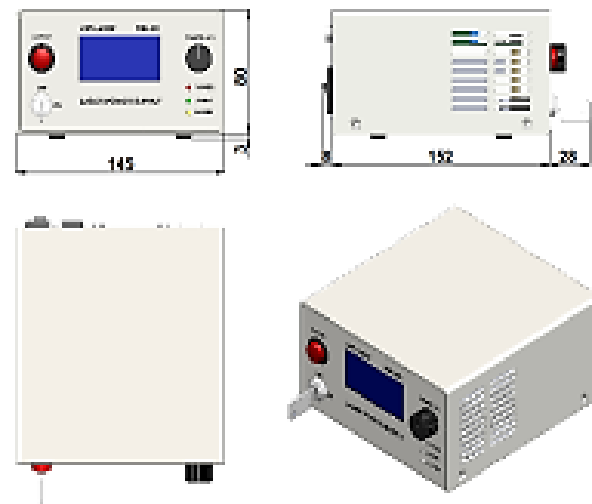
275 x 145 x 104 mm³, 2.3 kg

PSU-LED (adjustable output power)



277 x 145 x 106 mm³, 2.6 kg

PSU-SR (adjustable output power)



188 x 145 x 83 mm³, 1.2 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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