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RLTMPL-1064 10-20 µJ / 1-500mW

- **IR DPSS Q-Switched Pulsed Laser System**
- **1064 nm, 10-20 µJ**
- **Temperature-controlled**
- **CE certified**
- **1 Year warranty**

RoHS COMPLIANT

Description

RLTMPL1064 10-20 µJ is a series of infrared temperature-stabilized (**TEC**) diode pumped solid state (DPSS) laser systems, emitting at a typical wavelength of 1064 nm, with a **TEM$_{00}$** beam profile and output power stability of <3%.. It features a separate laser head and power supply unit, supporting a wide input voltage range of 90-260 VAC and safety interlock. Enhanced power stability of <2% and <1% are optionally available. **RLTMDL-1064 10-20 µJ** series 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
Operating Mode		Q-Switched pulsed				
Max. Average Power		200	500			mW
Single Pulse Energy		10 – 20				µJ
Pulse Duration		~1.3	3 – 5	5 – 10	10 – 25	ns
Peak Power		7 – 15	2 – 6	1 – 4	0.4 – 2	kW
Rep.Rate	Fixed	Setting up one fixed rep. rate internal between 1 Hz – 4 kHz with stable pulse energy, pulse duration and pulse period.				
	Ext. Trigger	1 Hz – 4 kHz by external trigger with stable pulse energy, pulse duration and pulse period				
	QCW	QCW state with one rep. rate between 5 – 20 kHz				
Average Power		Average power (mW) = Single pulse energy (µJ) * Rep.				mW
Average Power Stability (rms, over 4 hours)		< 3% , < 2%*, < 1%*				
Transverse Mode		TEM$_{00}$				
Warm-up Time		<10				min
M² Factor		<1.2				
Beam Diameter at aperture (1/e²)		~1.2				
Beam Divergence (full angle)		<1.5				
Beam Height (from base plate)		24.8				mm
Operating Temperature		10 – 35				°C
Power Supply (90-260VAC)		PSU-FDA (included)				
Expected Lifetime		10000				hours

* optionally available

ISO FDA RoHS CE

LASER RADIATION
AVOID EYE OR SKIN EXPOSURE TO
DIRECT OR SCATTERED RADIATION
CLASS 4 LASER PRODUCT

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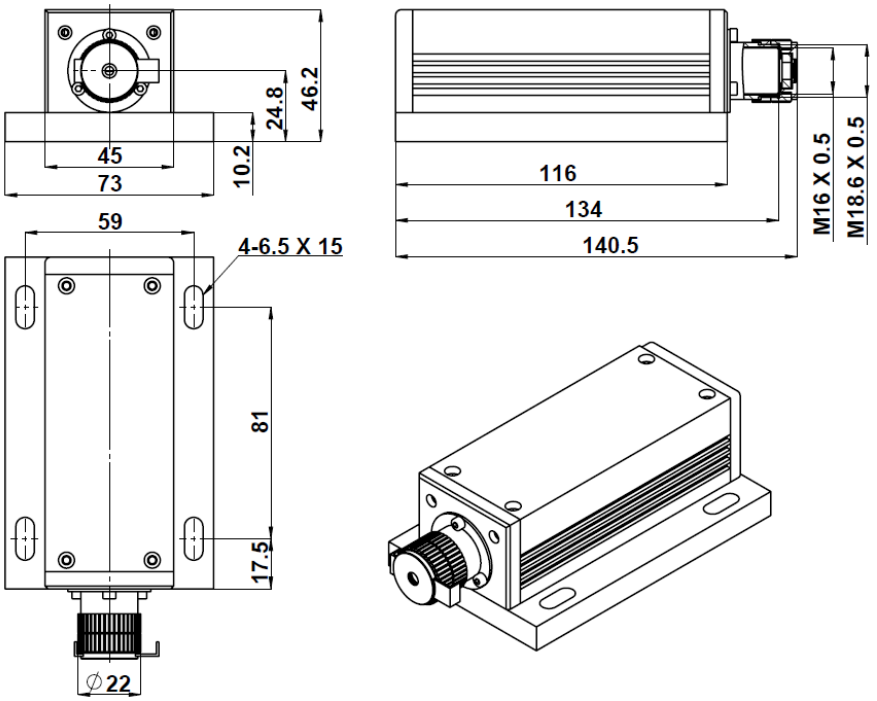
Outline Dimensions

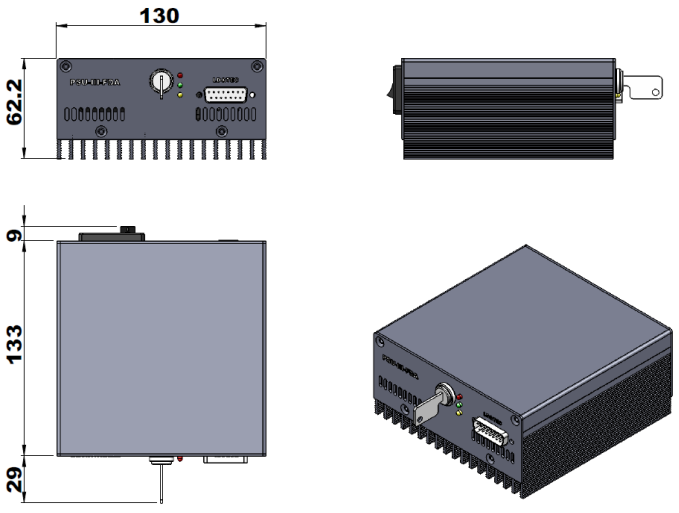
Laser head



140.5 x 73 x 46.2 mm³, 0.6 kg

Outline Dimensions

PSU-FDA



236 x 145 x 104 mm³, 2.3 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.