



## LDM635/5LTM

- Red Laser Diode Module
- 635 nm, <5 mW
- Modulation up to 1 kHz
- Adjustable Focus
- Glass Lens
- Automatic Power Control (APC)



### Description



**LDM635/5LTM** is a small size diode laser module with a focusable glass lens, designed for superior beam quality. It is emitting at a wavelength of typically **635 nm**, and an optical output power of **< 5 mW**. It features automatic power control (**APC**) driving electronics for stable operation, and features a modulation input for repetition rates of up to 1 kHz. **LDM635/5LTM** has been designed for 4.5-5 VDC supply voltage. A matching **power supply, holder and heat sink** is optionally available for quick setup (see page 3 for details).

### Maximum Ratings (T<sub>CASE</sub> = 25°C)

Parameter	Values		Unit
	Min.	Max.	
Operating temperature	- 10	+ 50	°C
Storage temperature	- 25	+ 85	°C

### Electro-Optical Characteristics (T<sub>CASE</sub> = 25°C)

Parameter	Values			Unit
	Min.	Typ.	Max.	
Peak Wavelength	625	635	645	nm
<b>Optical Output Power</b>			<b>5</b>	<b>mW</b>
Laser Class	3R			
Output Aperture		4		mm
Beam Diameter (@10 m)			8	mm
Beam Divergence		0.5		mrاد
Beam Shape	Elliptical			
<b>Supply Voltage</b>	<b>4.5</b>		<b>5</b>	<b>VDC</b>
Operating Current		30	45	mA
Modulation capability			1	kHz
Body	Brass, black anodized			
Collimating Lens	3-lens glass			
Dimensions		∅ 12.7 x 50		mm
MTTF (@25°C)	10000			h

**LASER RADIATION**  
AVOID DIRECT EYE EXPOSURE  
CLASS 3R LASER PRODUCT



## Connection

Lead	Description
Red	+VDC
Black	GND
Yellow	Modulation [TTL]

- TTL input (yellow lead) lead must carry +VDC signal for CW operation
- Module body is on +VDC potential

## Optional Accessories

### Heat Sink SQ50x34

- Al, black anodized
- Clamping mechanism
- 50 x 50 x 34 mm
- 114 g



### Holder RLM-1250

- Steel, black anodized
- Height, reach, tilt adjustable
- Fixture 360° turnable
- Max. diameter: 12.5 mm
- 69 x 67 mm
- 152 g



### Power supply LPS51C

- 100-240VAC
- AC Europlug (CEE7/16)
- IEC 60130-10 Type A con.
- Output 5 VDC, max 1 A
- CE certified
- 30 x 80 x 75 mm
- 80 g



## Precautions

### Static Electricity:

Precautions against electrostatic discharge (ESD) must be taken when handling or operating the module. Surge voltage or electrostatic discharge can result in complete failure of the laser module.

### Heat Sinking:

In order to maintain lifetime and stability of the laser module, efficient heat management is recommended.

### Safety:

This laser module emits highly concentrated invisible light which can be **hazardous to the human eye and skin**. It is classified as **CLASS 3R laser product** according to **IEC 60825-1** and **21 CFR Part 1040.10 Safety Standards**.

