



## RLDE405M-50-5

- Violet Laser Diode Module
- 405 nm, 50 mW
- **TTL Modulation <20 kHz**
- Focusable AR coated Glass Lens
- Automatic Power Control (APC)



### Description

**RLDE405M-50-5** is a violet modifiable diode laser module, emitting at a wavelength of typically **405 nm**, with an optical output power of **50 mW**, and **TTL modulation capability of <20 kHz**. It features **AR coated glass lens** for superior beam quality, and automatic power control (**APC**) for stable performance. **RLDE405M-50-5** is designed for 5 VDC supply voltage (adapter available, page 2), and comes with IEC 60130-10 connector. A leads only variant without connector is available on request.

### Maximum Ratings\*

Parameter	Values		Unit
	Min.	Max.	
Operating temperature	0	+ 60	°C
Storage temperature	- 30	+ 70	°C

\*Operating close to or exceeding these parameters may damage the device

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

Parameter	Values			Unit
	Min.	Typ.	Max.	
Peak Wavelength		405		nm
Optical Output Power		50		mW
TTL modulation			20	kHz
Output Aperture (diameter)		5		mm
Beam Shape	elliptical			
Divergence		0.6		mrad
Supply Voltage		5		VDC
Operating Current		160		mA
Body	Aluminium, black anodized			
Lens	Glass, AR coated (both sides)			
Connector	IEC 60130-10 (Type A, 5.5/2.1 mm)			
Dimensions	Ø 22 x 65			mm
MTTF (@25°C)	5000			h

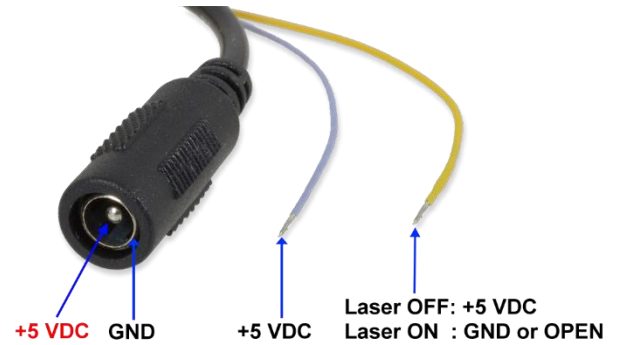
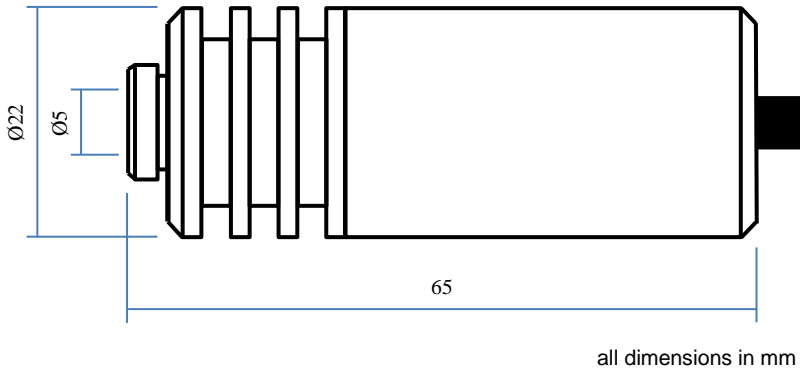




## Outline / Connector

### Module

### IEC 60130-10 Connector, Type A, 5.5/2.1 mm



## Optional Accessories

### Adapter 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 light which can be **hazardous to the human eye and skin**. It is classified as **CLASS 3B laser product** according to **IEC 60825-1** and **21 CFR Part 1040.10 Safety Standards**.

