



RLDE405M-50-5

- Violet Diode Laser Module
- 405 nm, <50 mW, APC
- TTL Modulation, <20 kHz
- Focus Adjustable
- Dimension: Ø22 x 65 mm



Description



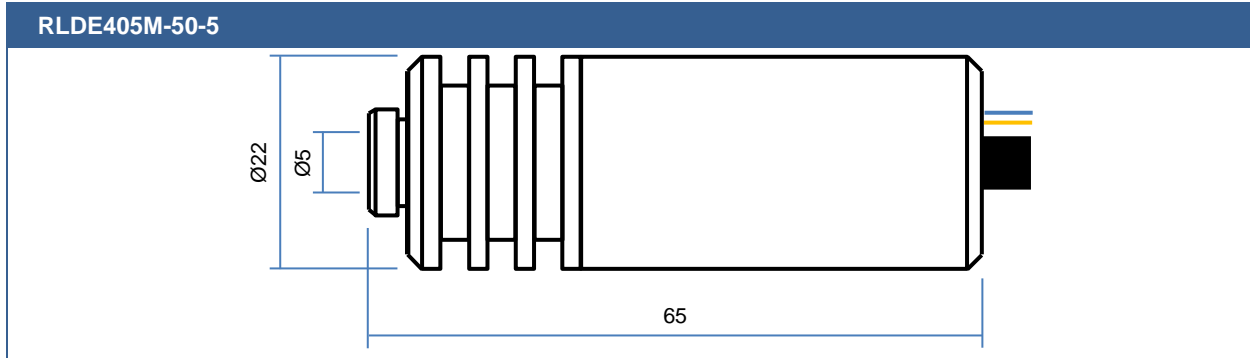
RLDE405M series of Diode Laser Modules has been designed with emphasis on **superior beam quality**, and **reliable operation**. The modules body is made of black anodized aluminum, enclosing laser diode, lens, and driving electronics. RLDE405M series features a **focusable glass lens optic** with a locking mechanism. The **incorporated 5 VDC driver** circuit additional supports **APC** (automatic power control) and **TTL modulation up to 20 kHz**.

Specifications

Parameter	Min.	Values Typ.	Max.	Unit
Peak Wavelength		405		nm
Optical Output Power			50	mW
Laser Class		3B		
Operating Voltage		DC 5		V
Operating Current			160	mA
Modulation, TTL			20	kHz
Control		APC		
Standard Operating Distance		10		m
Focus		Adjustable		
Beam Character		elliptical		
Elliptic Proportion				
Output Aperture		Ø5		mm
Divergence		0.6		mrad
Optic		Glass lens, both sides AR coated		
Operating Temperature	0		+60	°C
Storage Temperature	-30		+70	°C
Life Time	5000			hours
Material		black anodized aluminum		
Electrical Connection		connector plug and wires		
Dimension (Dia. x W)		Ø22 x 65		mm
Weight		60		g



Outline Dimensions



All Dimensions in mm

Electrical Connection



Precautions

Mounting Instruction:

In order to maintain lifetime and stability of the laser diode it is essential to provide efficient heat management. For long time stable operation proper contact between laser module and heat sink is mandatory.

Safety Advice:

This laser module emits highly concentrated visible 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**. Actual laser light emitted and precautions necessary strongly depend on mode of operation.