



## RLDH650M-40-5

- Red Diode Laser Module
- 650 nm, 40 mW
- TTL Modulation, <50 kHz
- Focus Adjustable
- Dimension: Ø16 x 50 mm



### Description



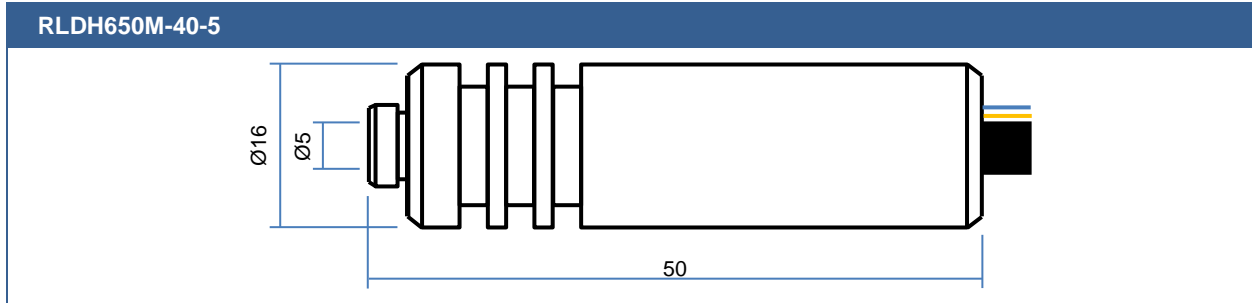
**RLDH650M** series of Diode Laser Modules has been designed with emphasis on **superior beam quality**, and **reliable operation**. The modules body is made of black anodized aluminum, enclosing laser diode, lens, and driving electronics. RLH650M series features a **focusable glass lens optic** with a locking mechanism. The **incorporated 5 VDC driver** circuit additional supports **TTL modulation up to 50 kHz**.

### Specifications

Parameter	Min.	Values Typ.	Max.	Unit
Peak Wavelength		650		nm
Optical Output Power		40		mW
Laser Class		3B		
Operating Voltage		DC 5		V
Operating Current			120	mA
Modulation, TTL			50	kHz
Control		APC		
Standard Operating Distance		10		m
Focus		Adjustable		
Beam Character		elliptical		
Elliptic Proportion		1:2.5		
Output Aperture		Ø5		mm
Divergence		1.0		mrad
Optic		Glass lens, both sides AR coated		
Operating Temperature	-10		+40	°C
Storage Temperature	-40		+80	°C
Life Time	8000			hours
Material		black anodized aluminum		
Electrical Connection		connector plug and wires		
Dimension (Dia. x W)		Ø16 x 50		mm
Weight		31		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.