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CW650-01

- RED Laser Diode Module
- 655 nm, <1 mW
- Focusable Acryl Lens
- Automatic Power Control
- 3 VDC Input Voltage



Description

CW650-01 is a compact size **focusable** laser diode module with a typical emission wavelength of **650 nm**, and an optical output power of **<1 mW**. It features automatic power control (**APC**) driving electronics for stable operation, and 3 VDC supply voltage. **CW650-01** comes equipped with a coaxial power connector. A matching **power supply**, **heat sink**, and suitable **laser module holder** is optionally available for quick setup and convenient operation (see page 3 for details).

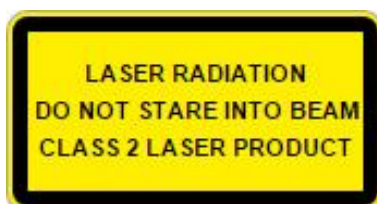
Maximum Ratings

Parameter	Values		Unit
	Min.	Max.	
Operating temperature	- 10	+ 50	°C
Storage temperature	- 40	+ 70	°C



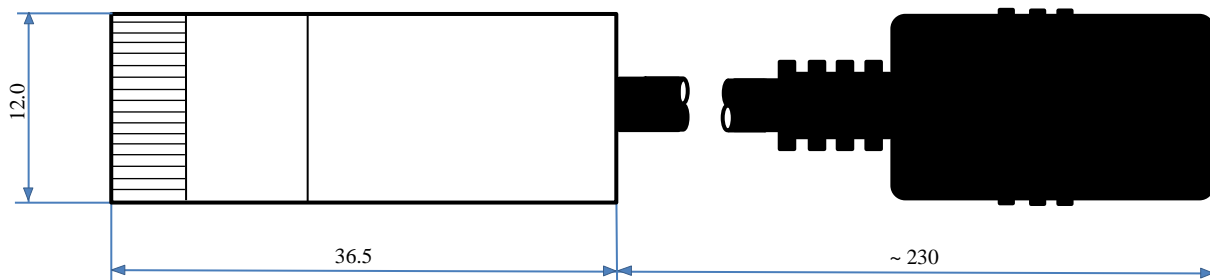
Electro-Optical Characteristics (T_{CASE} = 25°C)

Parameter	Values			Unit
	Min.	Typ.	Max.	
Peak Wavelength		655		nm
Radiated Power			1	mW
Beam diameter at aperture		4		mm
Beam shape	elliptical			
Beam divergence		1.0		mrad
Supply Voltage		3	3.3	VDC
Material body	Brass, Nickel plated (+VDC)			
Material lens	acryl			
Dimensions	Ø 12 x 36.5			mm
Connector	IEC 60130-10, Type A, 5.5/2.1 mm			





Outline Dimensions



all dimensions in mm

Electrical Connection

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



module housing on +VDC potential

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 diode.

Heat Sinking:

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

Safety:

This laser module emits highly concentrated visible light which can be **hazardous to the human eye and skin**. It is classified as **CLASS 2 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.





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

LPS31C

- 100-240VAC
- AC Europlug (CEE7/16)
- IEC 60130-10 Type A con.
- Output 3 VDC, max 1 A
- CE certified
- 30 x 80 x 75 mm
- 80 g



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