



ROITHNER LASERTECHNIK GmbH

WIEDNER HAUPTSTRASSE 76
TEL. +43 1 586 52 43 -O, FAX. -44

1040 VIENNA AUSTRIA
OFFICE@ROITHNER-LASER.COM



CW830-010

- IR Laser Diode Module
- 830 nm, 10 mW
- Automatic Power Control (APC)
- Focusable Acryl Lens
- 2.7 – 4.2 VDC Input Voltage



Description

CW830-010 is a compact size **focusable** infrared laser diode module with a typical emission wavelength of **830 nm**, and an optical output power of **10 mW**. It features **automatic power control (APC)** driving electronics, wide input voltage range of 2.7 - 4.2 VDC, and can be further customized with different connector, or as leads only variant.

Maximum Ratings*

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

* operating close to or outside these temperatures may damage the device

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

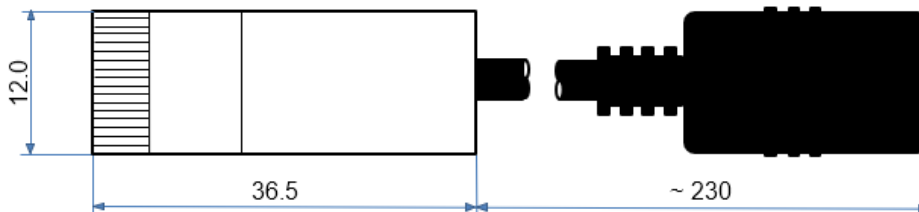
Parameter	Values			Unit
	Min.	Typ.	Max.	
Peak Wavelength		830		nm
Radiated Power		10		mW
Beam diameter at aperture		4		mm
Beam shape	elliptical			
Beam divergence		1.0		mrad
Supply Voltage	2.7		4.2	VDC
Material body	Brass, nickel plated (+VDC)			
Material lens	Acryl			
Dimensions	Ø 12 x 36.5			mm
Connector	Type	IEC 60130-10, Type A, 5.5/2.1 mm		
	Length	~ 230		mm





Outline / Connector

Module



all dimensions in mm

Connector

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



module housing 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 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



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 3B laser product** according to **IEC 60825-1** and **21 CFR Part 1040.10 Safety Standards**.

