

# Laser module red 650nm, circle with cross

Reference: AM2482

EAN13: -

HS code: 90132000



## Product attributes:

Performance: 10 mW, 30 mW, 50 mW, 100 mW, 150 mW, 200 mW

## Product features:

Light color: Red

Wavelength: 650 nm

Voltage: 5 V DC

Cable length: 100 cm

Connector: 5.5x2.1 mm

Waterproof grade: IP20

Lifetime: 8,000 hours

Appearance: Circle with a cross

## Product description:

The red 650nm laser module with a circle and cross projection is designed for aiming, positioning and optical guidance applications in industry, measurement technology and integration into devices. The module uses DOE optics with adjustable focus and is powered by 5V DC. The metal aluminum housing supports heat dissipation and ensures mechanical resistance during normal operation.

## Technical specifications

- Product type: laser module with circle projection with cross
- Laser color: red
- Wavelength: 650nm
- Case dimensions: Ø18 x 65mm
- Housing material: aluminum
- Lens type: PMMA
- Optics type: DOE
- Focus: adjustable
- Operating mode: APC/ACC
- Supply voltage: 5V DC
- Connection: 1m cable with DC connector 5.5/2.1mm
- Working temperature: -10 to +50°C
- Storage temperature: -40 to +85°C
- Mean time to failure: more than 8000 hours

## Real optical power table

| Rated power | Real optical performance |
|-------------|--------------------------|
| 10mW        | 7.5 to 8.5 mW            |
| 30mW        | 18 to 24mW               |
| 50mW        | 38 to 45mW               |
| 100mW       | 75 to 95 mW              |
| 150mW       | 100 to 120 mW            |
| 200mW       | 130 to 150 mW            |

## Functions and features

- Circle projection with crosshairs for precise optical aiming
- 650nm red laser suitable for general visual guidance and indication
- DOE optics for creating a defined pattern
- Adjustable focus to adapt projection to specific distance and application
- Aluminum body for better thermal stability and mechanical resistance
- 5V DC power supply for easy integration into devices and test benches
- APC and ACC operating modes for corresponding laser diode control

## Ideal for

- Industrial surveying and positioning
  - Production line guidance systems
  - Optical marking of reference points
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- Integration into measuring and control devices
- Laboratory and development applications
- Adjusting, setting up and checking geometry

## Package contents

- 1x laser module red 650nm, circle with cross
- 1x connection cable 1m with DC connector 5.5/2.1mm

## Why choose this product?

- Combination of compact dimensions and robust metal design
- Clearly defined circle and cross projection pattern for technical applications
- Clearly specified nominal and real optical power values
- Standard 5V DC power supply and ready-made cable connection
- Suitable solution for integration into industrial, laboratory and development systems

## Installation and operating instructions

- During installation, ensure a firm mechanical attachment of the module without vibration transmission.
- For proper operation, it is necessary to use a stabilized 5V DC power supply.
- After installation, adjust the focus according to the desired working distance and the size of the projected image.
- During long-term operation, we recommend ensuring adequate heat dissipation according to the selected power variant.
- Use the module within the specified operating temperature range.

## Safety notice

- Laser radiation can be dangerous to your eyesight.
- Do not look directly into the output beam or at its reflection from shiny surfaces.
- When integrating into a device, we recommend using appropriate protective measures corresponding to the module's power variant.
- The product is not intended for use without appropriate technical assessment in applications where failure could result in a risk to health or property.

