

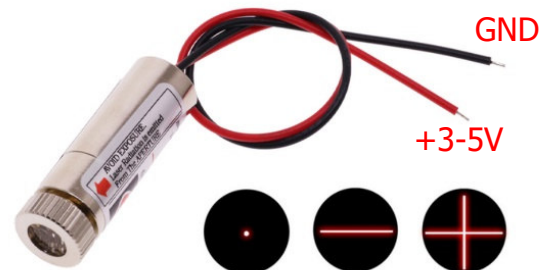
Datasheet for: Lasermodul LM3512 - 5mW 650nm

Point-Shaped Ordernumber: 0711906114233

Line-shaped Ordernumber: 0711906114240

Cross-shaped Ordernumber: 0711906114257

Rev: 02/26/2023



We offer these robust, ready to connect laser modules in three versions. When ordering, you can choose whether the laser beam should be projected in the form of a point, line or cross. The laser works with a wavelength of 650nm and is therefore red in the visible light range. The lens is rotatable. This allows the laser to be perfectly focused. Due to the wide supply voltage range of 3-5V DC and the low power consumption of 40mA, it can be used in a variety of electronic circuits and without great effort. The range varies depending on the jet type. You can find detailed information on this in the technical data. The laser is ideally suited for measuring and marking tasks in its effective range. The laser is not suitable for cutting or engraving materials of any kind. For this you need significantly higher performance and then of course also significantly higher protective devices.

Technical specifications:

Wavelength: 650nm Visible light

Light color: red

Laserclass: 3R

Initial shape: point, line or cross

Focus: adjustable

Operating mode: electrically excited

Laser Type: Semiconductor

Operating mode: continuous beam

Operating voltage: 3-5V DC

Current consumption: max. 40mA

Laser output power: 5mW

Housing length 35-36mm (depending on the focus setting)

Case diameter: 12mm

Weight: 15g

Cable length: 135mm (red=voltage, black=ground)

Range:

punctiform - inside buildings in darkness 100m in brightness 50m

line-shaped - inside buildings in darkness 10m in brightness 2m

cross-shaped - inside buildings in darkness 10m in brightness 2m

With an output power of 5mW, the laser module is one of the smaller of its kind, but you should still observe the usual safety precautions when using it:

1. Wear suitable safety goggles when experimenting with the module. Even with 5mW, a laser can damage the eye if the beam hits the eye, whether directly or indirectly (deflected).
2. Never point the laser at living beings. The eyes of animals can also be damaged.
3. Keep the laser module away from children. It's not a toy!

According to section 5.8 EN 60825-1, laser devices of classes 2 to 4 must be described on a sign with information about the maximum output values of the laser radiation, the pulse duration (if applicable) and the emitted wavelength(s). This information may be included on a label together with the class information or on a separate label. On the Downloads tab you will find the link to a PNG graphic with a sign in German. The graphic can be scaled very well in size. As the text needs to be changed in other European countries, we also have a link to a Word document on this page. You can change the text as you like and take a screenshot of it, which you can then use as an information sign. Or you can also purchase ready-made information signs from specialist retailers.

Incidentally, we offer an optional mount for these laser modules ([LH12A](#)). This allows the module to be securely fastened in a variety of ways. We use this bracket not only for final assembly, but also for experiments in our electronics lab. This prevents the module from rolling back and forth uncontrollably or falling.

All dimensions given are approximate and may vary slightly.

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In the **Downloads** area you will find the RoHS and CE declarations of conformity, as well as possibly additional technical information about this product.



The product must not be disposed of with household waste.



The product meets the requirements of the EU regarding the RoHS directive.



The product meets the requirements of the EU with regard to electromagnetic compatibility.