# 13LRM12-M125-1.5+55CM-660-60-M25-T12-PS-7

Laser Macro Line Generator with a fan angle

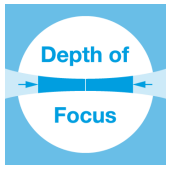


## FEATURES

Laser line with a fan angle, approx. uniform intensity distributionand extended depth of focus.

- Line length: 26 mm
- Line width: 79 µm
- Wavelength: 660 nm
- Working distance: 111 mm
- Depth of focus: 20.4 mm

- Macro Line Generator for extended depth of focus
- With RS232 interface







## DESCRIPTION

The laser diode beam source type 13LRM12-M125-1.5+55CM-660-60-M25-T12-PS-7 has a fan angle of 12° with a constant line width and approx. uniform intensity distribution along the laser line as well an extended depth of focus.

The fine-structure is a chain of equidistant dots with a spacing of approx. 1/2 the line width. The line width is constant along the laser line. Across the laser line the intensity distribution is approx. Gaussian.

The laser has integrated electronics type PS with micro-controller for control of the laser output power and serial interface (RS232). The output power can be controlled using the modulation input ports (TTL and analog) or manually using the potentiometer.

The working distance can be adjusted by adjusting the focus setting. Please note that beam parameters like line length and line width increase proportionally to the working distance.

A fine-adjustment of the distance between laser and target is recommended for fine-focusing.

## TECHNICAL DATA

13LRM12-M125-1.5+55CM-660-60-M25-T12-PS-7

| | | |
|---|---|---|
| **Series** | | 13LRM |
| **Order Code** | | 13LRM12-M125-1.5+55CM-660-60-M25-T12-PS-7 |
| **Line profile** | | Constant Intensity Distribution |
| **Line type** | | Laser Macro Line |
| **Wavelength** | | 660 +4/-6 nm |
| **Laser output power** | | 60 mW |
| **Laser safety class** | | 3B |
| **Fan angle α** | | 12 deg |
| **Focussing range** | | 95-195 mm |
| **Working distance** | | 111 mm |
| **Line length** | | 26 mm |
| **Line width** | | 0.079 mm |
| **Depth of focus** | | 20.4 mm |
| **Edge intensity** | | 80 % |
| **Diameter laser module** | | 25/28 mm |
| **Module length** | | 86.8 mm |
| **Installation length** | | 227.8 mm |
| **Cable length** | | 1.5 m |
| **Connector type** | | Lumberg SV70 IEC 61076-2-106 |
| **Supply voltage** | | 5 ± 0.2 V |
| **Max. current consumption** | | 0.25 A |
| **Working temperature** | | 15 - 40 °C |
| **Modulation inputs** | Analog | TTL |
| **Input resistance** | 9 kOhm | 9 kOhm |
| **Max. modulation frequency** | 0.001 kHz | 250 kHz |
| **Modulation delay ON/OFF** | 3000/3000 µs | 0.5/0.2 µs |
| **Rise / Fall time** | 200000/200000 µs | 0.8/0.4 µs |
| **Interface** | | RS232 |

## DOWNLOADS

930412000124.pdf

## ACCESSORIES

| | |
|---|---|
| **50HD-15** | Hex key WS 1.5 |
| **9D-12** | Screwdriver WS 1.2 |
| **13MK-25-36-10-F** | Mounting Console with flat base plate |
| **13MK-25-36-10-M** | Mounting Console with base plate with dovetail profile |
| **PS051007E** | Power Supply 5 V for laser modules with RS232 interface |

## RELATED PRODUCTS

| | |
|---|---|
| **LASER MODULES SERIES 13LR** | ▪ Micro Line Generator, fan angle<br>▪ Uniform intensity distribution |
| **LASER MODULES SERIES 13LNM** | ▪ Micro Line Generator, **small** fan angle<br>▪ Uniform intensity distribution<br>▪ Extended depth of focus |
| **LASER MODULES SERIES 5LMM+25CM** | ▪ **Compact** Micro Line, **small** fan angle<br>▪ Gaussian intensity distribution<br>▪ Extended depth of focus |
| **LASER MODULES SERIES 5LPM+25CM** | ▪ **Compact** Macro Line, **large** fan angle<br>▪ Gaussian intensity distribution<br>▪ Extended depth of focus |
| **LASER MODULES SERIES 5LMM** | ▪ Macro Line, **small** fan angle<br>▪ Gaussian intensity distribution<br>▪ Extended depth of focus |
| **LASER MODULES SERIES 5LPM** | ▪ Macro Line, **large** fan angle<br>▪ Gaussian intensity distribution<br>▪ Extended depth of focus |

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## CONTACT

**For more information please contact:**
**Schäfter + Kirchhoff GmbH**
**Kieler Str. 212**
**22525 Hamburg**
**Germany**
**Tel: +49 40 85 39 97-0**
**Fax: +49 40 85 39 97-79**

**info@sukhamburg.de**
**www.sukhamburg.com**

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