

## 13LNM250-S250-7+90CM-640-9-H22-M60-C-6

Macro Line Generator with a fan angle



### FEATURES

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

- Line length: 14 mm
- Line width: 33  $\mu\text{m}$
- Wavelength: 640 nm
- Working distance: 236.5 mm
- Depth of focus: 3.64 mm

- Macro Line Generator for extended depth of focus



## DESCRIPTION

The laser diode beam source type 13LNM250-S250-7+90CM-640-9-H22-M60-C-6 has a fan angle of 0°, approx. uniform intensity distribution along the laser line and extended depth of focus.

More precisely, it is Gaussian clipped by an aperture with an edge intensity of 74 %. Across the laser line the intensity distribution is Gaussian.

The laser has integrated electronics [type C](#) for control of the laser output power. The output power can be controlled using the [modulation input ports \(TTL and analog\)](#), or manually using the potentiometer.

For this laser type the working distance is fixed. A fine-adjustment of the distance between laser and target is recommended for fine-focusing in order to achieve minimal line width.

## TECHNICAL DATA

13LNM250-S250-7+90CM-640-9-H22-M60-C-6

Series	13LNM250	
Order Code	13LNM250-S250-7+90CM-640-9-H22-M60-C-6	
Line profile	Constant Intensity Distribution	
Line type	Laser Macro Line	
Wavelength	640 +5/-5 nm	
Laser output power	9 mW	
Laser safety class	3B	
Focussing range	236.5-236.5 mm	
Working distance	236.5 mm	
Line length	14 mm	
Line width	0.033 mm	
Depth of focus	3.64 mm	
Edge intensity	74 %	
Diameter laser module	25/28 mm	
Module length	134.4 mm	
Installation length	400.9 mm	
Cable length	1.5 m	
Connector type	Lumberg SV50 IEC 61076-2-106	
Supply voltage	5 ± 0.2 V	
Max. current consumption	0.25 A	
Working temperature	0 - 40 °C	
Modulation inputs	Analog	TTL
Input resistance	22 kOhm	22 kOhm
Max. modulation frequency	100 kHz	100 kHz
Modulation delay ON/OFF	1/0.5 µs	2/1 µs
Rise / Fall time	3/2 µs	3/2 µs

## DOWNLOADS

[13LNM+90CM+205.pdf](#)

## ACCESSORIES

9D-12                      Screwdriver WS 1.2

PS051003E              Power Supply 5 V

## RELATED PRODUCTS

**LASER MODULES  
SERIES 13LN**

- Micro Line, **small** fan angle
- Uniform intensity distribution
- Thin lines

**LASER MODULES  
SERIES LNC-13LNM**

- Macro Line Generator, **small** fan angle
- Uniform intensity distribution
- Extended depth of focus
- Low noise

**LASER MODULES  
SERIES 13LRM**

- Macro Line Generator, fan angle
- Uniform intensity distribution
- Extended depth of focus

**LASER MODULES  
SERIES 5LMM+25CM**

- **Compact** Micro Line, **small** fan angle
- Gaussian intensity distribution
- Extended depth of focus

**LASER MODULES  
SERIES 5LPM+25CM**

- **Compact** Macro Line, **large** fan angle
- Gaussian intensity distribution
- Extended depth of focus

**LASER MODULES  
SERIES 5LMM**

- Macro Line, **small** fan angle
- Gaussian intensity distribution
- Extended depth of focus

**LASER MODULES  
SERIES 5LPM**

- Macro Line, **large** fan angle
- Gaussian intensity distribution
- 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](mailto:info@sukhamburg.de)**

**[www.sukhamburg.com](http://www.sukhamburg.com)**

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