

13LNM165-S250-7+90CM-685-12-H13-M60-CS-7

Macro Line Generator with a fan angle

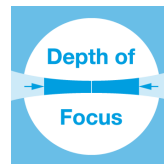


FEATURES

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

- Line length: 20 mm
- Line width: 35 μm
- Wavelength: 685 nm
- Working distance: 236.5 mm
- Depth of focus: 3.89 mm

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



DESCRIPTION

The laser diode beam source type 13LNM165-S250-7+90CM-685-12-H13-M60-CS-7 has a fan angle of 1.5°, 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 75 %. Across the laser line the intensity distribution is Gaussian.

The laser has integrated electronics [type CS](#) 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.

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

13LNM165-S250-7+90CM-685-12-H13-M60-CS-7

Series	13LNM165	
Order Code	13LNM165-S250-7+90CM-685-12-H13-M60-CS-7	
Line profile	Constant Intensity Distribution	
Line type	Laser Macro Line	
Wavelength	685 +10/-10 nm	
Laser output power	12 mW	
Laser safety class	3B	
Fan angle α	1.5 deg	
Focussing range	236.5-236.5 mm	
Working distance	236.5 mm	
Line length	20 mm	
Line width	0.035 mm	
Depth of focus	3.89 mm	
Edge intensity	75 %	
Diameter laser module	25/28 mm	
Module length	134.4 mm	
Installation length	400.9 mm	
Cable length	1.5 m	
Connector type	Lumberg SV70 IEC 61076-2-106	
Supply voltage	5 $\pm$ 0.2 V	
Max. current consumption	0.25 A	
Working temperature	0 - 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 μ s	0.5/0.2 μ s
Rise / Fall time	200000/200000 μ s	0.8/0.4 μ s
Interface	RS232	

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

ACCESSORIES

9D-12

Screwdriver WS 1.2

PS051007E

Power Supply 5 V for laser modules with RS232 interface

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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