

### 13LNM165-S250-7+90CM-660-38-M25-M60-PS-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: 34 μm
Wavelength: 660 nm
Working distance: 236

Working distance: 236.5 mmDepth of focus: 3.75 mm

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





# **DESCRIPTION**

The laser diode beam source type 13LNM165-S250-7+90CM-660-38-M25-M60-PS-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 64 %. Across the laser line the intensity distribution is Gaussian.

The laser has integrated electronics <u>type PS</u> with micro-controller for control of the laser output power and serial interface (RS232). The output power can be controlled using the <u>modulation input ports (TTL and analog)</u> 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-660-38-M25-M60-PS-7

Series	13LNM165	
Order Code	13LNM165-S250-7+90CM-660-38-M25-M60-PS-7	
Line profile	Constant Intensity Distribution	
Line type	Laser Macro Line	
Wavelength	660 +4/-6 nm	
Laser output power	38 mW	
Laser safety class	3В	
Fan angle α	1.5 deg	
Focussing range	236.5-236.5 mm	
Working distance	236.5 mm	
Line length	20 mm	
Line width	0.034 mm	
Depth of focus	3.75 mm	
Edge intensity	64 %	
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 ± 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	face RS232	



## **DOWNLOADS**



### **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 angleUniform 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 angleUniform 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



This is a printout of the page <a href="https://sukhamburg.com/products/details/13LNM165-S250-7\_90CM-660-38-M25-M60-PS-7">https://sukhamburg.com/products/details/13LNM165-S250-7\_90CM-660-38-M25-M60-PS-7</a> from 4/29/2024

#### 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

## **LEGAL NOTICE**

#### Copyright 2020 Schäfter+Kirchhoff GmbH. All rights reserved.

Text, image, graphic, sound, video and animation files and their arrangement on Schäfter+Kirchhoff GmbH webpages are protected by copyright and other protective laws. The content may not be copied for commercial use or reproduced, modified or used on other websites. [more]