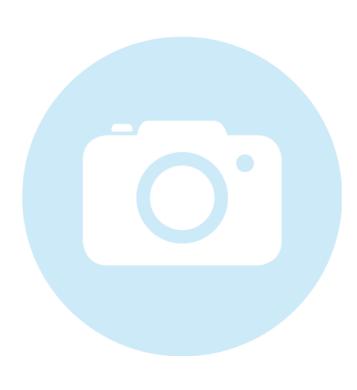
#### 13LN165-S250+90CM-685-17-H13-M60-CS-7

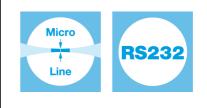
Micro Line Generator with a fan angle



#### FEATURES

Laser line with a fan angle, approx. uniform intensity distribution and very thin lines.

- Line length: 20 mm
- Line width: 17 μm
- Wavelength: 685 nm
- Working distance: 249 mm
- Micro Line Generator for small laser line widths and high power density in the focal plane
- With RS232 interface



#### DESCRIPTION

The laser diode beam source type 13LN165-S250+90CM-685-17-H13-M60-CS-7 has a fan angle of 1.7° and approx. uniform intensity distribution along the laser line.

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 line width is constant along 60 % of the central are, outside this area the line width differs up to 30 %.

The laser has integrated electronics <u>type CS</u> for control of the laser output power and serial interface (RS232). The output power can be controlled using the <u>modulation input</u> <u>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**

13LN165-S250+90CM-685-17-H13-M60-CS-7

Series		13LN165
Order Code	13LN165-S250+90CM-685-17-H13-M60-CS-7	
Line profile	Constant Intensity Distribution	
Line type	Laser Micro Line	
Wavelength	685 +10/-10 nm	
Laser output power	17 mW	
Laser safety class	3В	
Fan angle α	1.7 deg	
Focussing range	249-249 mm	
Working distance	249 mm	
Line length	20 mm	
Line width	0.017 mm	
Rayleigh range	0.556 mm	
Edge intensity	75 %	
Diameter laser module	25/28 mm	
Module length	121.9 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	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 µs	0.5/0.2 μs
Rise / Fall time	200000/200000 µs	0.8/0.4 µs
Interface		RS232

# ACCESSORIES



9D-12	Screwdriver WS 1.2

interface

PS051007E

Power Supply 5 V for laser modules with RS232

### **RELATED PRODUCTS**

LASER MODULES SERIES 13LNM	<ul> <li>Micro Line Generator, small fan angle</li> <li>Uniform intensity distribution</li> <li>Extended depth of focus</li> </ul>
LASER MODULES SERIES LNC-13LN	<ul> <li>Micro Line, small fan angle</li> <li>Uniform intensity distribution</li> <li>Thin lines</li> <li>Low noise</li> </ul>
LASER MODULES SERIES 13LR	<ul><li>Micro Line Generator, fan angle</li><li>Uniform intensity distribution</li></ul>
LASER MODULES SERIES 5LM+25CM	<ul> <li>Compact Micro Line, small fan angle</li> <li>Gaussian intensity distribution</li> </ul>
LASER MODULES SERIES 5LP+25CM	<ul> <li>Compact Micro Line, large fan angle</li> <li>Gaussian intensity distribution</li> </ul>
LASER MODULES SERIES 5LM	<ul> <li>Micro Line, small fan angle</li> <li>Gaussian intensity distribution</li> </ul>
LASER MODULES SERIES 5LP	<ul> <li>Micro Line, large fan angle</li> <li>Gaussian intensity distribution</li> </ul>

#### **DATA SHEET**

This is a printout of the page <u>https://sukhamburg.com/products/details/13LN165-S250\_90CM-685-17-H13-M60-CS-7</u> from 4/23/2024

### 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]

