13LNM165-S1000-7+90CM-830-12-H19-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: 80 mm
- Line width: 171 μm
- Wavelength: 830 nm
- Working distance: 964.5 mm
- Depth of focus: 75.5 mm
- Macro Line Generator for extended depth of focus



DESCRIPTION

The laser diode beam source type 13LNM165-S1000-7+90CM-830-12-H19-M60-C-6 has a fan angle of 3.8°, 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 76 %. Across the laser line the intensity distribution is Gaussian.

The laser has integrated electronics <u>type C</u> for control of the laser output power. 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-S1000-7+90CM-830-12-H19-M60-C-6

Series		13LNM165
Order Code	13LNM165-S1000-7+90CM-830-1	L2-H19-M60-C-6
Line profile	Constant Intensity Distribution	
Line type	Laser Macro Line	
Wavelength	830 +10/-10 nm	
Laser output power	12 mW	
Laser safety class		3B
Fan angle α		3.8 deg
Focussing range		964.5-964.5 mm
Working distance		964.5 mm
Line length		80 mm
Line width	0.171 mm	
Depth of focus	75.5 mm	
Edge intensity		76 %
Diameter laser module	25/28 mm	
Module length		134.4 mm
Installation length		1128.9 mm
Cable length		1.5 m
Connector type	Lumberg SV50 II	EC 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



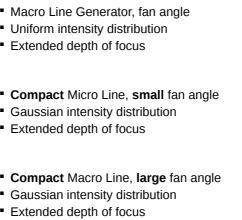
13LNM+90CM+205.pdf

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 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 a Gaussian intensity distribution Extended depth of focus
LASER MODULES SERIES 5LPM+25CM	 Compact Macro Line, large fan a 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



angle



DATA SHEET

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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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