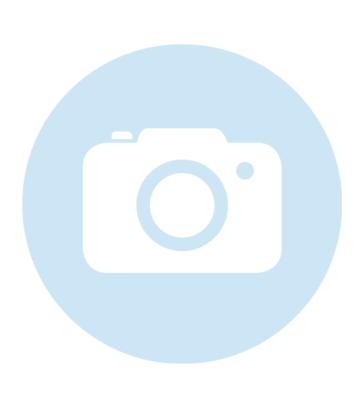
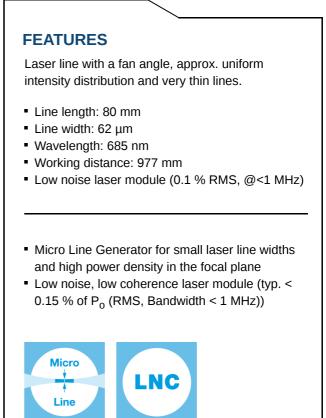
LNC-13LN165-S1000+91CR-685-9-H13-M60-H-6

Low Noise Micro Line Generator with a fan angle





DESCRIPTION

The laser diode beam source type LNC-13LN165-S1000+91CR-685-9-H13-M60-H-6 has a fan angle of 3.8° 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 H</u> for control of the laser output power. It is a low noise laser source (0.1 % RMS,@<1 MHz) with reduced coherence length and operates mode-hopping free. Due to the reduced coherence length the speckle contrast might be lowered. Please note that this effect is smaller for smaller lines and spots. 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

LNC-13LN165-S1000+91CR-685-9-H13-M60-H-6

Series		13LN165
Order Code	LNC-13LN165-S1000+91CR-685-9-H13-M60-H-6	
Line profile	Constant Intensity Distribution	
Line type	Laser Micro Line	
Wavelength	685 +10/-10 nm	
Laser output power	9 mW	
Laser safety class	3В	
Fan angle α	3.8 deg	
Focussing range	977-977 mm	
Working distance	977 mm	
Line length	80 mm	
Line width	0.062 mm	
Rayleigh range	8.9 mm	
Edge intensity	75 %	
Diameter laser module	25/28 mm	
Module length	134.4 mm	
Installation length	1111.4 mm	
Cable length	1.5 m	
Connector type	Lumberg SV50 IEC 61076-2-106	
Supply voltage	5 ± 0.25 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	2/0.3 µs	1.5/0.1 μs
Rise / Fall time	1/1 µs	1/1 µs
Noise (< 1 MHZ RMS)		0.1 %



ACCESSORIES

9D-12

Screwdriver WS 1.2

PS051003E

Power Supply 5 V

RELATED PRODUCTS

LASER MODULES SERIES LNC-13LNM	 Macro Line Generator, small fan angle Uniform intensity distribution Extended depth of focus Low noise
LASER MODULES SERIES 13LN	 Micro Line, small fan angle Uniform intensity distribution Thin lines
LASER MODULES SERIES LNC-5LM	 Micro Line, small fan angle Gaussian intensity distribution Low noise
LASER MODULES SERIES LNC-5LP	 Micro Line, large fan angle Gaussian intensity distribution

Low noise

This is a printout of the page <u>https://sukhamburg.com/products/details/LNC-13LN165-S1000_91CR-685-9-H13-M60-H-6</u> from 5/6/2024

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