13LN40-S1000+90CM-685-17-H13-M60-CS-7

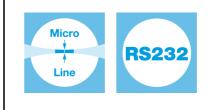
Micro Line Generator with a fan angle



FEATURES

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

- Line length: 304 mm
- Line width: 62 µm
- Wavelength: 685 nm
- Working distance: 972 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 13LN40-S1000+90CM-685-17-H13-M60-CS-7 has a fan angle of 16.8° 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 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

13LN40-S1000+90CM-685-17-H13-M60-CS-7

Series		13LN40
Order Code	13LN40-S1000+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		16.8 deg
Focussing range	972-972 mm	
Working distance	972 mm	
Line length	304 mm	
Line width	0.062 mm	
Rayleigh range	8.9 mm	
Edge intensity	75 %	
Diameter laser module	25/28 mm	
Module length	125.9 mm	
Installation length	1127.9 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

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ACCESSORIES

9D-12	Screwdriver WS 1.2
PS051007E	Power Supply 5 V for laser modules with RS232 interface

RELATED PRODUCTS

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



DATA SHEET

This is a printout of the page <u>https://sukhamburg.com/products/details/13LN40-S1000_90CM-685-17-H13-M60-CS-7</u> from 4/24/2024

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