13LN40-S1000+90CM-635-4-H10-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: 58 µm
- Wavelength: 635 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-635-4-H10-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 84 %. 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 type CS for control of the laser output power and serial interface (RS232). The output power can be controlled using the modulation input ports (TTL and analog) 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-635-4-H10-M60-CS-7

Series	13LN40	
Order Code	13LN40-S1000+90CM-635-4-H10-M60-CS-7	
Line profile	Constant Intensity Distribution	
Line type	Laser Micro Line	
Wavelength	635 +10/-10 nm	
Laser output power	4 mW	
Laser safety class	3R	
Fan angle α	16.8 deg	
Focussing range	972-972 mm	
Working distance	972 mm	
Line length	304 mm	
Line width	0.058 mm	
Rayleigh range	8.25 mm	
Edge intensity	84 %	
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	

DOWNLOADS

951210000056.pdf

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

This is a printout of the page https://sukhamburg.com/products/details/13LN40-S1000_90CM-635-4-H10-M60-CS-7 from 3/28/2024

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]