

13LN40-M100+90CM-639-8-H18-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: 32 mm
- Line width: 7 μm
- Wavelength: 639 nm
- Working distance: 92.5 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-M100+90CM-639-8-H18-M60-CS-7 has a fan angle of 10° and approx. uniform intensity distribution along the laser line.

More precisely, it is Gaussian clipped by an aperture with an edge intensity of 87 %. Across the laser line the intensity distribution is Gaussian. The line width is constant along 60 % of the central area, 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-M100+90CM-639-8-H18-M60-CS-7

| | | |
|---------------------------|-------------------------------------|-----------------|
| Series | 13LN40 | |
| Order Code | 13LN40-M100+90CM-639-8-H18-M60-CS-7 | |
| Line profile | Constant Intensity Distribution | |
| Line type | Laser Micro Line | |
| Wavelength | 639 +10/-10 nm | |
| Laser output power | 8 mW | |
| Laser safety class | 3B | |
| Fan angle α | 10 deg | |
| Focussing range | 92.5-92.5 mm | |
| Working distance | 92.5 mm | |
| Line length | 32 mm | |
| Line width | 0.007 mm | |
| Rayleigh range | 0.083 mm | |
| Edge intensity | 87 % | |
| Diameter laser module | 25/28 mm | |
| Module length | 125.9 mm | |
| Installation length | 248.4 mm | |
| Cable length | 1.5 m | |
| Connector type | Lumberg SV70 IEC 61076-2-106 | |
| Supply voltage | 5 \pm 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 μ s | 0.5/0.2 μ s |
| Rise / Fall time | 200000/200000 μ s | 0.8/0.4 μ s |
| 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-M100_90CM-639-8-H18-M60-CS-7
from 4/30/2024

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. [\[more\]](#)