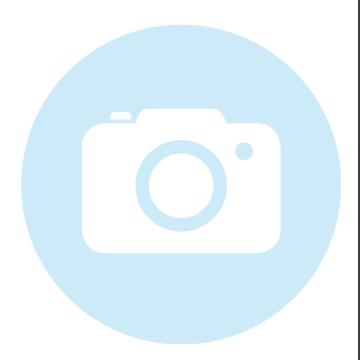


13LN165-S1000+90CM-660-54-M25-M60-PS-7

Micro Line Generator with a fan angle



FEATURES

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

Line length: 80 mm
Line width: 60 μm
Wavelength: 660 nm
Working distance: 977 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 13LN165-S1000+90CM-660-54-M25-M60-PS-7 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 64 %. 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 PS</u> with micro-controller for control of the laser output power and serial interface (RS232). 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

13LN165-S1000+90CM-660-54-M25-M60-PS-7

| Series | 13LN165 | |
|---------------------------|--|------------|
| Order Code | 13LN165-S1000+90CM-660-54-M25-M60-PS-7 | |
| Line profile | Constant Intensity Distribution | |
| Line type | Laser Micro Line | |
| Wavelength | 660 +4/-6 nm | |
| Laser output power | 54 mW | |
| Laser safety class | 3B | |
| Fan angle α | 3.8 deg | |
| Focussing range | 977-977 mm | |
| Working distance | 977 mm | |
| Line length | 80 mm | |
| Line width | 0.06 mm | |
| Rayleigh range | 8.57 mm | |
| Edge intensity | 64 % | |
| Diameter laser module | 25/28 mm | |
| Module length | 121.9 mm | |
| Installation length | 1128.9 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 | 15 - 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 | |

ACCESSORIES



9D-12 Screwdriver WS 1.2

PS051007E Power Supply 5 V for laser modules with RS232

interface

RELATED PRODUCTS

LASER MODULES ■ Micro Line Generator, small fan angle

SERIES 13LNM Uniform intensity distribution

Extended depth of focus

LASER MODULES Micro Line, small fan angle **SERIES LNC-13LN**

Uniform intensity distribution

Thin lines Low noise

LASER MODULES Micro Line Generator, fan angle

Uniform intensity distribution **SERIES 13LR**

LASER MODULES Compact Micro Line, small fan angle

SERIES 5LM+25CM Gaussian intensity distribution

LASER MODULES ■ Compact Micro Line, large fan angle

SERIES 5LP+25CM Gaussian intensity distribution

■ Micro Line, small fan angle LASER MODULES

SERIES 5LM Gaussian intensity distribution

LASER MODULES Micro Line, large fan angle

SERIES 5LP Gaussian intensity distribution



This is a printout of the page https://sukhamburg.com/products/details/13LN165-S1000_90CM-660-54-M25-M60-PS-7 from 4/29/2024

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