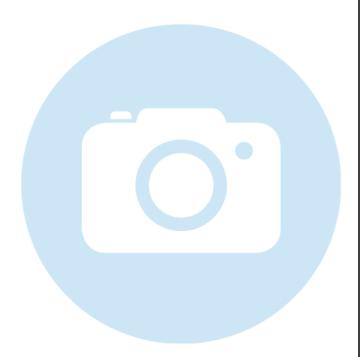


13LN165-S500+90CM-660-54-M25-M60-PS-7

Micro Line Generator with a fan angle



FEATURES

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

Line length: 40 mm
Line width: 30 μm
Wavelength: 660 nm
Working distance: 424 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-S500+90CM-660-54-M25-M60-PS-7 has a fan angle of 3.4° 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-S500+90CM-660-54-M25-M60-PS-7

Series	13LN165	
Order Code	13LN165-S500+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	3.4 deg	
Focussing range	424-424 mm	
Working distance	424 mm	
Line length	40 mm	
Line width	0.03 mm	
Rayleigh range	2.14 mm	
Edge intensity	64 %	
Diameter laser module	25/28 mm	
Module length	121.9 mm	
Installation length	575.9 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	ace 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

■ Compact Micro Line, small fan angle

LASER MODULES • Micro Line, small fan angle

SERIES LNC-13LN • Uniform intensity distribution

Thin linesLow noise

LASER MODULES

LASER MODULES

• Micro Line Generator, fan angle
SERIES 13LR
• Uniform intensity distribution

SERIES 5LM+25CM • Gaussian intensity distribution

LASER MODULES • Compact Micro Line, large fan angle

SERIES 5LP+25CM • Gaussian intensity distribution

LASER MODULES • Micro Line, small fan angle

SERIES 5LM • Gaussian intensity distribution

LASER MODULES • Micro Line, large fan angle

SERIES 5LP • Gaussian intensity distribution



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