13LN250-S500+90CR-635-4-H10-M60-C-6

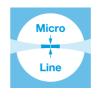
Micro Line Generator with a fan angle



FEATURES

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

- Line length: 30 mm
- Line width: 29 μm
- Wavelength: 635 nm
- Working distance: 424 mm
- Micro Line Generator for small laser line widths and high power density in the focal plane



DESCRIPTION

The laser diode beam source type 13LN250-S500+90CR-635-4-H10-M60-C-6 has a fan angle of 1.7° 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 <u>type C</u> for control of the laser output power. 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

13LN250-S500+90CR-635-4-H10-M60-C-6

Series		13LN250
Order Code	13LN250-S500+90CR-635-4-H10-M60-C-6	
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	1.7 deg	
Focussing range	424-424 mm	
'orking distance 424 mm		
Line length	30 mm	
Line width	0.029 mm	
Rayleigh range	2.06 mm	
Edge intensity	84 %	
Diameter laser module	25/28 mm	
Module length	105.9 mm	
Installation length	529.9 mm	
Cable length		1.5 m
Connector type	Lumberg SV50 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	22 kOhm	22 kOhm
Max. modulation frequency	100 kHz	100 kHz
Modulation delay ON/OFF	1/0.5 µs	2/1 µs
Rise / Fall time	3/2 µs	3/2 µs

ACCESSORIES

9D-12

Screwdriver WS 1.2



Schäfter+Kirchhoff

PS051003E

SERIES 5LP

Power Supply 5 V

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	 Micro Line, large fan angle

Gaussian intensity distribution



DATA SHEET

This is a printout of the page <u>https://sukhamburg.com/products/details/13LN250-S500_90CR-635-4-H10-M60-C-6</u> from 4/26/2024

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