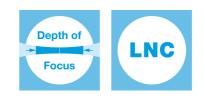
#### LNC-13LNM250-S250-7+91CM-635-2-H10-M60-H-6

Low Noise Macro Line Generator with a fan angle



#### **FEATURES** Laser line with a fan angle, approx. uniform intensity distribution and extended depth of focus.

- Line length: 14 mm
- Line width: 33 μm
- Wavelength: 635 nm
- Working distance: 236.5 mm
- Depth of focus: 3.61 mm
- Low noise laser module (0.1 % RMS, @<1 MHz)</li>
- Macro Line Generator for extended depth of focus
- Low noise, low coherence laser module (typ. < 0.15 % of P<sub>0</sub> (RMS, Bandwidth < 1 MHz))</li>



# DESCRIPTION

The laser diode beam source type LNC-13LNM250-S250-7+91CM-635-2-H10-M60-H-6 has a fan angle of 0°, approx. uniform intensity distribution along the laser line and extended depth of focus.

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 laser has integrated electronics <u>type H</u> for control of the laser output power. It is a low noise laser source (0.1 % RMS,@<1 MHz) with reduced coherence length and operates mode-hopping free. Due to the reduced coherence length the speckle contrast might be lowered. Please note that this effect is smaller for smaller lines and spots. 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**

LNC-13LNM250-S250-7+91CM-635-2-H10-M60-H-6

Series		13LNM250	
Order Code	LNC-13LNM250-S250-7+91CM-635-2-H10-M60-H-6		
Line profile	Constant Intensity Distribution		
Line type	Laser Macro Line		
Wavelength	635 +10/-10 nm		
Laser output power	2 mW		
Laser safety class	3R		
Focussing range	236.5-236.5 mm		
Working distance	236.5 mm		
Line length	14 mm		
Line width	0.033 mm		
Depth of focus	3.61 mm		
Edge intensity	84 %		
Diameter laser module	25/28 mm		
Module length	143.9 mm		
Installation length	410.4 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	2/0.3 μs	1.5/0.1 μs	

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### **DATA SHEET**

Rise / Fall time	1/1 µs	1/1 µs
Noise (< 1 MHZ RMS)		0.1%

#### **DOWNLOADS**



13LNM+91CM+205.pdf

# ACCESSORIES

9D-12 Screwdriver WS 1.2

PS051003E

Power Supply 5 V

# **RELATED PRODUCTS**

LASER MODULES SERIES LNC-13LN

- Micro Line, small fan angle
- Uniform intensity distribution
- Thin linesLow noise

LASER MODULES SERIES 13LNM

- Micro Line Generator, small fan angle
- Uniform intensity distribution
- Extended depth of focus

LASER MODULES SERIES LNC-5LMM

LASER MODULES SERIES LNC-5LPM

- Macro Line, small fan angle
- Gaussian intensity distribution
- Extended depth of focus
- Low Noise
- Macro Line, large fan angle
- Gaussian intensity distribution
- Extended depth of focus
- Low noise



### **DATA SHEET**

This is a printout of the page <u>https://sukhamburg.com/products/details/LNC-13LNM250-S250-7\_91CM-635-2-H10-M60-H-6</u> from 5/5/2024

## 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

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