

## LNC-13MMC-S250-8+96CM-635-1-B08-M60-H-6

Low Noise Laser Macro Focus Generator with rotationally symmetric beam profile

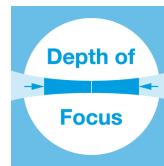


### FEATURES

Laser spot with rotationally symmetric, Gaussian beam profile and extended depth of focus.

- Spot diameter: 0.033 x 0.033 mm
- Wavelength: 635 nm
- Working distance: 234.7 mm
- Depth of focus: 2.76 mm
- Low noise laser module (0.1 % RMS, @<1 MHz)

- Macro Focus Generator for extended depth of focus
- Low noise, low coherence laser module (typ. < 0.15 % of  $P_0$  (RMS, Bandwidth < 1 MHz))



## DESCRIPTION

The laser diode beam source type LNC-13MMC-S250-8+96CM-635-1-B08-M60-H-6 produces a rotationally symmetric laser spot with extended depth of focus. The beam profile is rotationally symmetric and approx. Gaussian.

The laser type LNC-13MMC-S250-8+96CM-635-1-B08-M60-H-6 produces a circular laser spot with extended depth of focus. The beam profile is approx. Gaussian.

The laser has integrated electronics [type H](#) 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 [modulation input ports \(TTL and analog\)](#), or manually using the potentiometer.

The working distance can be adjusted by adjusting the focus setting. Please note that the spot diameter increases proportionally to the working distance. A fine-adjustment of the distance between laser and target is recommended for fine-focusing.

## TECHNICAL DATA

LNC-13MMC-S250-8+96CM-635-1-B08-M60-H-6

Series	13MMC	
Order Code	LNC-13MMC-S250-8+96CM-635-1-B08-M60-H-6	
Line profile	Gaussian Intensity Distribution	
Wavelength	635 +5/-5 nm	
Laser output power	1 mW	
Laser safety class	3R	
Focussing range	205-410 mm	
Working distance	234.7 mm	
Spot height	0.033 mm	
Spot width	0.033 mm	
Depth of focus	2.76 mm	
Diameter laser module	25/28 mm	
Module length	139.8 mm	
Installation length	404.5 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
Rise / Fall time	1/1 µs	1/1 µs
Noise (< 1 MHz RMS)	0.1 %	

## ACCESSORIES

50HD-15	Hex key WS 1.5
9D-12	Screwdriver WS 1.2
PS051003E	Power Supply 5 V

## RELATED PRODUCTS

### LASER MODULES SERIES LNC-13MC

- Micro Focus Generator
- **Rotationally symmetric**, Gaussian beam profile
- Low noise

### LASER MODULES SERIES 13MMC

- Laser Macro Focus Generator
- **Rotationally symmetric** beam profile
- Extended depth of focus

### LASER MODULES SERIES LNC-13MM

- Macro Focus Generator
- **Circular** beam profile
- Extended depth of focus
- Low noise

This is a printout of the page [https://sukhamburg.com/products/details/LNC-13MMC-S250-8\\_96CM-635-1-B08-M60-H-6](https://sukhamburg.com/products/details/LNC-13MMC-S250-8_96CM-635-1-B08-M60-H-6) from 4/23/2024

## 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](mailto:info@sukhamburg.de)

[www.sukhamburg.com](http://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. [\[more\]](#)