

## LNC-13MMC-S1000-8+96CR-658-4-B09-M60-H-6

Low Noise Laser Macro Focus Generator with rotationally symmetric beam profile

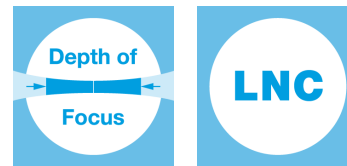


### FEATURES

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

- Spot diameter: 0.138 x 0.138 mm
- Wavelength: 658 nm
- Working distance: 967.5 mm
- Depth of focus: 45.8 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-S1000-8+96CR-658-4-B09-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-S1000-8+96CR-658-4-B09-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-S1000-8+96CR-658-4-B09-M60-H-6

|                                  |  |            |
|----------------------------------|--|------------|
| <b>Series</b>                    | 13MMC                                    |            |
| <b>Order Code</b>                | LNC-13MMC-S1000-8+96CR-658-4-B09-M60-H-6 |            |
| <b>Line profile</b>              | Gaussian Intensity Distribution          |            |
| <b>Wavelength</b>                | 658 +5/-5 nm                             |            |
| <b>Laser output power</b>        | 4 mW                                     |            |
| <b>Laser safety class</b>        | 3R                                       |            |
| <b>Focussing range</b>           | 815-1295 mm                              |            |
| <b>Working distance</b>          | 967.5 mm                                 |            |
| <b>Spot height</b>               | 0.138 mm                                 |            |
| <b>Spot width</b>                | 0.138 mm                                 |            |
| <b>Depth of focus</b>            | 45.8 mm                                  |            |
| <b>Diameter laser module</b>     | 25/28 mm                                 |            |
| <b>Module length</b>             | 142.8 mm                                 |            |
| <b>Installation length</b>       | 1110.3 mm                                |            |
| <b>Cable length</b>              | 1.5 m                                    |            |
| <b>Connector type</b>            | Lumberg SV50 IEC 61076-2-106             |            |
| <b>Supply voltage</b>            | 5 ± 0.25 V                               |            |
| <b>Max. current consumption</b>  | 0.25 A                                   |            |
| <b>Working temperature</b>       | 0 - 40 °C                                |            |
| <b>Modulation inputs</b>         | Analog                                   | TTL        |
| <b>Input resistance</b>          | 22 kOhm                                  | 22 kOhm    |
| <b>Max. modulation frequency</b> | 100 kHz                                  | 100 kHz    |
| <b>Modulation delay ON/OFF</b>   | 2/0.3 µs                                 | 1.5/0.1 µs |
| <b>Rise / Fall time</b>          | 1/1 µs                                   | 1/1 µs     |
| <b>Noise (&lt; 1 MHz RMS)</b>    | 0.1 %                                    |            |

## DOWNLOADS



[951210000057.pdf](#)

## 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-S1000-8\\_96CR-658-4-B09-M60-H-6](https://sukhamburg.com/products/details/LNC-13MMC-S1000-8_96CR-658-4-B09-M60-H-6) from 12/5/2023

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