### LNC-5LTM-75-11+56CM-520-11-O11-A7.5-HP-4

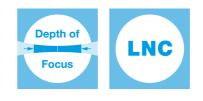
Semi-telecentric Macro Line Generator



#### FEATURES

Semi-telecentric laser line with constant line length of 4.8 mm and extended depth of focus.

- Line length: 4.8 mm
- Line width: 59 µm
- Wavelength: 520 nm
- Working distance: 68 mm
- Depth of focus: 13 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-5LTM-75-11+56CM-520-11-O11-A7.5-HP-4 produces a semi-telecentric laser line with 4.8 mm line length and extended depth of focus. The intensity profile is Gaussian in line direction clipped by an aperture with an edge intensity of 18 %. The line width is constant along the laser line. Across the laser line the intensity distribution is approx. Gaussian.

The laser has integrated electronics <u>type HP</u> with micro-controller 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</u> ports (<u>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-5LTM-75-11+56CM-520-11-O11-A7.5-HP-4

Series		5LTM
Order Code	LNC-5LTM-75-11+56CM-520-11-O11-A7.5-HP-4	
Line profile	Gaussian Intensity Distribution	
Line type	Laser Macro Line	
Wavelength	520 +10/-5 nm	
Laser output power	11 mW	
Laser safety class	3В	
Focussing range	68-68 mm	
Working distance	68 mm	
Line length	e length 4.8 mm	
Line width	0.059 mm	
Depth of focus	13 mm	
Edge intensity	18 %	
Diameter laser module	25/28 mm	
Module length	88 mm	
Installation length	186 mm	
Cable length	1.5 m	
Connector type	Lumberg SV40 IEC 61076-2-106	
Supply voltage	12 ± 0.5 V	
Max. current consumption	0.3 A	
Working temperature	15 - 40 °C	
Modulation inputs	Analog	TTL
Input resistance	9 kOhm	9 kOhm
Max. modulation frequency	0.001 kHz	300 kHz
Modulation delay ON/OFF	2000/500 μs	0.5/0.2 μs
Rise / Fall time	200000/200000 µs	0.8/0.3 µs
Noise (< 1 MHZ RMS)		0.1 %



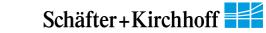
# ACCESSORIES

9D-12	Screwdriver WS 1.2
13MK-25-36-10-F	Mounting Console with flat base plate
13МК-25-36-10-М	Mounting Console with base plate with dovetail profile
PS120516E	Power Supply 12 V

### **RELATED PRODUCTS**

LASER MODULES SERIES LNC-5LT-2	<ul> <li>Semi-telecentric Micro Line</li> <li>Gaussian intensity distribution</li> <li>Constant line length ca. 2 mm</li> <li>Low noise</li> </ul>
LASER MODULES SERIES 5LTM-2	<ul> <li>Semi-telecentric Macro Line</li> <li>Gaussian intensity distribution</li> <li>Constant line length ca. 2 mm</li> <li>Extended depth of focus</li> </ul>
LASER MODULES SERIES LNC-13LTM	<ul> <li>Semi-telecentric Macro Line</li> <li>Uniform intensity distribution</li> <li>Constant line length 15 mm</li> <li>Extended depth of focus</li> <li>Low noise</li> </ul>
LASER MODULES SERIES LNC-5LTM-1	<ul> <li>Semi-telecentric Macro Line</li> <li>Gaussian intensity distribution</li> </ul>

- Constant line length ca. 4.8 mm
- Extended depth of focus
- Low noise



# **DATA SHEET**

This is a printout of the page <u>https://sukhamburg.com/products/details/LNC-5LTM-75-11\_56CM-520-11-011-A7\_5-HP-4</u> from 4/25/2024

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