#### LNC-5LTM-150-22+56CM-450-16-006-A7.5-HP-4

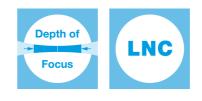
Semi-telecentric Macro Line Generator



#### FEATURES

Semi-telecentric laser line with constant line length of 2.4 mm and extended depth of focus.

- Line length: 2.4 mm
- Line width: 60 μm
- Wavelength: 450 nm
- Working distance: 139 mm
- Depth of focus: 11.3 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-150-22+56CM-450-16-O06-A7.5-HP-4 produces a semi-telecentric laser line with 2.4 mm line length. In this case the line length is given on the 13.5%-level. The intensity profile is Gaussian in line direction and the line is truncated at 4.8 mm. 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-150-22+56CM-450-16-O06-A7.5-HP-4

Series		5LTM
Order Code	LNC-5LTM-150-22+56CM-450-16-006-A7.5-HP-4	
Line profile	Gaussian Intensity Distribution	
Line type	Laser Macro Line	
Wavelength	450 +10/-10 nm	
Laser output power	16 mW	
Laser safety class	3В	
Focussing range	139-139 mm	
Working distance	ance 139 mm	
ine length 2.4 mm		
Line width	width 0.06 mm	
Depth of focus	11.3 mm	
Edge intensity	15 %	
Diameter laser module	25/28 mm	
Module length	88 mm	
Installation length	257 mm	
Cable length	1.5 m	
Connector type	Lumberg SV40 IEC 61076-2-106	
Supply voltage	12 ± 0.5 V	
Max. current consumption	0.3A	
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 %



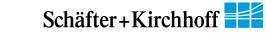
#### ACCESSORIES

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-150-22\_56CM-450-16-006-A7\_5-HP-4</u> from 4/29/2024

## 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

## **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]

