LNC-5LPM60-S150-1+56CM-635-3-H10-A8-H-6

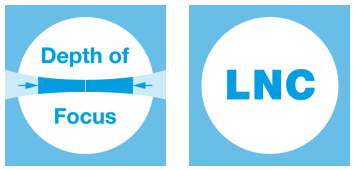
Low Noise Macro Line Generator with a large fan angle

FEATURES

Laser line with a large fan angle, Gaussian intensity distribution and extended depth of focus.

- Line length: 168 mm
- Line width: 139 µm
- Wavelength: 635 nm
- Working distance: 142 mm
- Depth of focus: 63.7 mm
- Low noise laser module (0.1 % RMS, @<1 MHz)

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



DESCRIPTION

The laser diode beam source type LNC-5LPM60-S150-1+56CM-635-3-H10-A8-H-6 has a fan angle of 62° and an extended depth of focus.

The intensity profile is Gaussian in line direction clipped by an aperture with an edge intensity of 31 %. The line width is constant along the laser line. Across the laser line the intensity distribution 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 beam parameters like line length and line width increase proportionally to the working distance. A fine-adjustment of the distance between laser and target is recommended for fine-focusing.

TECHNICAL DATA

LNC-5LPM60-S150-1+56CM-635-3-H10-A8-H-6

Series	5LPM	
Order Code	LNC-5LPM60-S150-1+56CM-635-3-H10-A8-H-6	
Line profile	Gaussian Intensity Distribution	
Line type	Laser Macro Line	
Wavelength	635 +10/-10 nm	
Laser output power	3 mW	
Laser safety class	3R	
Fan angle α	62 deg	
Focussing range	120-255 mm	
Working distance	142 mm	
Line length	168 mm	
Line width	0.139 mm	
Depth of focus	63.7 mm	
Edge intensity	31 %	
Diameter laser module	25/28 mm	
Module length	101 mm	
Installation length	273 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
13MK-25-36-10-F	Mounting Console with flat base plate
13MK-25-36-10-M	Mounting Console with base plate with dovetail profile
PS051003E	Power Supply 5 V

RELATED PRODUCTS

LASER MODULES SERIES LNC-5LPM
- Macro Line, **large** fan angle
- Gaussian intensity distribution
- Extended depth of focus
- Low noise

LASER MODULES SERIES 5LPM
- Macro Line, **large** fan angle
- Gaussian intensity distribution
- Extended depth of focus

LASER MODULES SERIES LNC-13LNM
- Macro Line Generator, **small** fan angle
- Uniform intensity distribution
- Extended depth of focus
- Low noise

LASER MODULES SERIES LNC-5LMM
- Macro Line, **small** fan angle
- Gaussian intensity distribution
- Extended depth of focus
- Low Noise

This is a printout of the page https://sukhamburg.com/products/details/LNC-5LPM60-S150-1_56CM-635-3-H10-A8-H-6 from 3/28/2024

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]