LNC-5LM15-S88+56CR-639-9-H18-A8-H-6

Low Noise Micro Line Generator with a fan angle



FEATURES

Laser line with a fan angle and Gaussian intensity distribution.

- Line length: 21.9 mm
- Line width: 38 µm
- Wavelength: 639 nm
- Working distance: 78 mm
- Low noise laser module (0.1 % RMS, @<1 MHz)

- Micro Line Generator for small laser line widths and high power density in the focal plane
- Low noise, low coherence laser module (typ. < 0.15 % of P_0 (RMS, Bandwidth < 1 MHz))

Micro Line LNC

DESCRIPTION

The laser diode beam source type LNC-5LM15-S88+56CR-639-9-H18-A8-H-6 has a fan angle of 15°.

The intensity profile is Gaussian in line direction clipped by an aperture with an edge intensity of 38 %. The line width is constant along the laser line. Across the laser line the intensity distribution is 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-5LM15-S88+56CR-639-9-H18-A8-H-6

Series		5LM
Order Code		LNC-5LM15-S88+56CR-639-9-H18-A8-H-6
Line profile		Gaussian Intensity Distribution
Line type		Laser Micro Line
Wavelength		639 +10/-10 nm
Laser output power		9 mW
Laser safety class		3B
Fan angle α		15 deg
Focussing range		65-120 mm
Working distance		78 mm
Line length		21.9 mm
Line width		0.038 mm
Rayleigh range		3.52 mm
Edge intensity		38 %
Diameter laser module		25/28 mm
Module length		89.8 mm
Installation length		167.8 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-5LMM
- Macro Line, **small** fan angle
- Gaussian intensity distribution
- Extended depth of focus
- Low Noise

LASER MODULES SERIES 5LM
- Micro Line, **small** fan angle
- Gaussian intensity distribution

LASER MODULES SERIES LNC-13LN
- Micro Line, **small** fan angle
- Uniform intensity distribution
- Thin lines
- Low noise

LASER MODULES SERIES LNC-5LP
- Micro Line, **large** fan angle
- Gaussian intensity distribution
- Low noise

This is a printout of the page https://sukhamburg.com/products/details/LNC-5LM15-S88_56CR-639-9-H18-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]