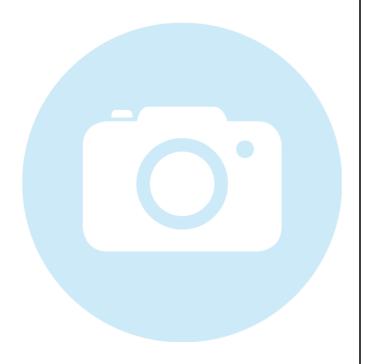


LNC-5LPM60-S150-1+56CM-450-19-O06-A7.5-HP-4

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: 99 μm
Wavelength: 450 nm
Working distance: 142 mm
Depth of focus: 45.1 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-450-19-O06-A7.5-HP-4 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 15 %. 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 ports (TTL and analog)</u> 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-450-19-O06-A7.5-HP-4

Laser safety class	ibution ro Line	
Line type Laser Mac Wavelength Laser output power Laser safety class	ro Line -10 nm 19 mW 3B	
Wavelength 450 +10/ Laser output power Laser safety class	-10 nm 19 mW 3B	
Laser output power Laser safety class	19 mW 3B	
Laser safety class	3B	
Fan angle o	62 deg	
Fan angle α		
Focussing range 120-2	55 mm	
/orking distance 142 mm		
Line length 1	168 mm	
vidth 0.099 mm		
Depth of focus 45	45.1 mm	
Edge intensity 15 %		
Diameter laser module 25/28 mm		
Module length 101 mm		
Installation length 273 mm		
Cable length 1.5 m		
Connector type Lumberg SV40 IEC 61076	Lumberg SV40 IEC 61076-2-106	
Supply voltage 12:	12 ± 0.5 V	
Max. current consumption 0.3A		
Working temperature 15	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

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

PS120516E Power Supply 12 V

RELATED PRODUCTS

SERIES 5LPM

SERIES LNC-5LMM

LASER MODULES Macro Line, large fan angle **SERIES LNC-5LPM**

Gaussian intensity distribution

Extended depth of focus

Low noise

LASER MODULES Macro Line, large fan angle

Gaussian intensity distribution

Extended depth of focus

LASER MODULES Macro Line Generator, small fan angle

SERIES LNC-13LNM Uniform intensity distribution

Extended depth of focus

Low noise

LASER MODULES 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-450-19-O06-A7_5-HP-4 from 4/26/2024

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