LNC-5LP60-S50+56CR-640-13-H22-A8-H-6

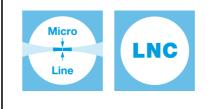
Low Noise Micro Line Generator with a large fan angle



FEATURES

Laser line with a large fan angle and Gaussian intensity distribution.

- Line length: 48 mm
- Line width: 19 μm
- Wavelength: 640 nm
- Working distance: 46 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 P₀ (RMS, Bandwidth < 1 MHz))



DESCRIPTION

The laser diode beam source type LNC-5LP60-S50+56CR-640-13-H22-A8-H-6 has a fan angle of 62°.

The intensity profile is Gaussian in line direction clipped by an aperture with an edge intensity of 13 %. The line width is constant along the laser line. Across the laser line the intensity distribution is Gaussian.

The laser has integrated electronics <u>type H</u> 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-5LP60-S50+56CR-640-13-H22-A8-H-6

Order CodeLNC-5LP60-S50+56CR-640-13-H22-A8-Line profileGaussian Intensity DistributLine typeLaser Micro LWavelength640+5/-5Laser output power13 mLaser safety classCFan angle α62 mFocussing range35-70 mWorking distance46 mLine width0.019 mRayleigh range0.9 mEdge intensity11 mDiameter laser module25/28 mModule length98.6 mInstallation length144.6 m	on ne nm nm NW 3B eg nm nm nm
Line type Laser Micro L Wavelength 640 +5/-5 Laser output power 13 m Laser safety class 13 m Fan angle α 62 m Focussing range 35-70 m Working distance 46 m Line length 48 m Line width 0.019 m Rayleigh range 0.9 m Edge intensity 13 m Diameter laser module 25/28 m Module length 98.6 m	ne nm nW 3B eg nm nm nm nm
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Rayleigh range0.9Edge intensity11Diameter laser module25/28Module length98.6	nm
Edge intensity11Diameter laser module25/28Module length98.6	
Diameter laser module25/28Module length98.6	%
Module length 98.6	
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Installation length 144.6	۱m
	۱m
Cable length 1.	5 m
Connector type Lumberg SV50 IEC 61076-2-2	06
Supply voltage 5 ± 0.	2 V
Max. current consumption 0.2	5A
Working temperature 0 - 40	°C
Modulation inputs Analog	TL
Input resistance22 kOhm22 kO	۱m
Max. modulation frequency100 kHz100 k	Hz
Modulation delay ON/OFF 2/0.3 μs 1.5/0.1	μs
Rise / Fall time 1/1 μs 1/1	



Noise (< 1 MHZ RMS)

0.1%

DOWNLOADS



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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 5LP	 Micro Line, large 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-5LM	 Micro Line, small fan angle Gaussian intensity distribution

Low noise



DATA SHEET

This is a printout of the page <u>https://sukhamburg.com/products/details/LNC-5LP60-S50_56CR-640-13-H22-A8-H-6</u> from 4/26/2024

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

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