

LNC-5LT-100-2+56CM-685-19-H13-A8-H-6

Semi-telecentric Micro Line Generator



FEATURES

Semi-telecentric laser line with constant line length of 2.4 mm.

Line length: 2.4 mm
Line width: 18 μm
Wavelength: 685 nm
Working distance: 96 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-5LT-100-2+56CM-685-19-H13-A8-H-6 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 Gaussian.

The laser has integrated electronics $\underline{type\ H}$ 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 $\underline{modulation\ input\ ports\ (TTL\ and\ analog)}$ 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-5LT-100-2+56CM-685-19-H13-A8-H-6

Series		5LT
Order Code	LNC-5LT-100-2+56CM-685-19-H13-A8-H-6	
Line profile	Gaussian Intensity Distribution	
Line type	Laser Micro Line	
Wavelength	685 +10/-10 nm	
Laser output power	19 mW	
Laser safety class	3B	
Focussing range	96-96 mm	
Working distance	96 mm	
Line length	2.4 mm	
Line width	0.018 mm	
Rayleigh range	0.757 mm	
Edge intensity	15 %	
Diameter laser module	25/28 mm	
Module length	82.6 mm	
Installation length	208.6 mm	
Cable length	1.5 m	
Connector type	Lumberg SV50 IEC 61076-2-106	
Supply voltage	5 ± 0.25 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
oise (< 1 MHZ RMS) 0.1 %		



DOWNLOADS



ACCESSORIES

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-5LTM-2
Semi-telecentric Macro Line
Gaussian intensity distribution

Constant line length ca. 2 mm
 Extended depth of focus

Low noise

LASER MODULES

SERIES 5LTM-2

Gaussian intensity distribution
Constant line length ca. 2 mm

Extended depth of focus

LASER MODULES
SERIES
Semi-telecentric Micro Line
Uniform intensity distribution

LNC-13LT • Constant line length 15 mm

Low noise

LASER MODULES
SERIES LNC-5LT-1
Semi-telecentric Micro Line
Gaussian intensity distributio

Gaussian intensity distributionConstant line length ca. 4.8 mm

Low noise



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