

LNC-5LT-75-2+56CM-520-14-O11-A7.5-HP-4

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: 11 μm
Wavelength: 520 nm
Working distance: 74 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-75-2+56CM-520-14-O11-A7.5-HP-4 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 <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.



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-75-2+56CM-520-14-O11-A7.5-HP-4

Line profile Line type Laser Micro Li Wavelength 520 +10/-5 n Laser output power Laser safety class Focussing range 74-74 n Working distance 74 n Line length 2.4 n Line width 0.011 n Rayleigh range 8dge intensity 18 Diameter laser module 195/28 n Module length 182.6 n Installation length 186.6 n Cable length 1.5 Connector type Lumberg SV40 IEC 61076-2-1 Supply voltage 12 ± 0.5 Supply voltage 12 ± 0.5 Modulation inputs Analog T Input resistance 9 kOhm 9 kOt Max. modulation frequency 0.001 kHz 300 k	Series		5LT
Line type Laser Micro Line Wavelength 520 +10/-5 f Laser output power 14 m Laser safety class 74-74 m Focussing range 74-74 m Working distance 74 m Line length 2.4 m Line width 0.011 m Rayleigh range 0.368 m Edge intensity 18 Diameter laser module 25/28 m Module length 82.6 m Installation length 186.6 m Cable length 1.5 Connector type Lumberg SV40 IEC 61076-2-1 Supply voltage 12 ± 0.5 Max. current consumption 0.3 Working temperature 15 - 40 Modulation inputs Analog T Input resistance 9 kOhm 9 kOh Max. modulation frequency 0.001 kHz 300 k	Order Code	LNC-5LT-75-2+56CM-520-14-O11-A7.5-HP-4	
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Laser output power 14 m Laser safety class 74-74 m Working distance 74 m Line length 2.4 m Line width 0.011 m Rayleigh range 0.368 m Edge intensity 18 Diameter laser module 25/28 m Module length 82.6 m Installation length 186.6 m Cable length 1.5 Connector type Lumberg SV40 IEC 61076-2-1 Supply voltage 12 ± 0.5 Max. current consumption 0.3 Working temperature 15 - 40 Modulation inputs Analog T Input resistance 9 kOhm 9 kOt Max. modulation frequency 0.001 kHz 300 k	Line type	Laser Micro Line	
Laser safety class Focussing range 74-74 m	Wavelength	520 +10/-5 nm	
Focussing range 74-74 m Working distance 74 m Line length 2.4 m Line width 0.011 m Rayleigh range 0.368 m Edge intensity 18 Diameter laser module 25/28 m Module length 82.6 m Installation length 186.6 m Cable length 1.5 Connector type Lumberg SV40 IEC 61076-2-1 Supply voltage 12 ± 0.5 Max. current consumption 0.3 Working temperature 15 - 40 Modulation inputs Analog T Input resistance 9 kOhm 9 kOl Max. modulation frequency 0.001 kHz 300 k	Laser output power	14 mW	
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Line length 2.4 m Line width 0.011 m Rayleigh range 0.368 m Edge intensity 18 Diameter laser module 25/28 m Module length 82.6 m Installation length 186.6 m Cable length 1.5 Connector type Lumberg SV40 IEC 61076-2-1 Supply voltage 12 ± 0.5 Max. current consumption 0.3 Working temperature 15 - 40 Modulation inputs Analog T Input resistance 9 kOhm 9 kOh Max. modulation frequency 0.001 kHz 300 k	Focussing range	74-74 mm	
Line width 0.011 m Rayleigh range 0.368 m Edge intensity 18 Diameter laser module 25/28 m Module length 82.6 m Installation length 186.6 m Cable length 1.5 Connector type Lumberg SV40 IEC 61076-2-1 Supply voltage 12 ± 0.5 Max. current consumption 0.3 Working temperature 15 - 40 Modulation inputs Analog T Input resistance 9 kOhm 9 kOh Max. modulation frequency 0.001 kHz 300 k	Working distance	74 mm	
Rayleigh range 0.368 m Edge intensity 18 Diameter laser module 25/28 m Module length 82.6 m Installation length 186.6 m Cable length 1.5 Connector type Lumberg SV40 IEC 61076-2-1 Supply voltage 12 ± 0.5 Max. current consumption 0.3 Working temperature 15 - 40 Modulation inputs Analog T Input resistance 9 kOhm 9 kOh Max. modulation frequency 0.001 kHz 300 k	Line length	2.4 mm	
Edge intensity 18 Diameter laser module 25/28 m Module length 82.6 m Installation length 186.6 m Cable length 1.5 Connector type Lumberg SV40 IEC 61076-2-1 Supply voltage 12 ± 0.5 Max. current consumption 0.3 Working temperature 15 - 40 Modulation inputs Analog T Input resistance 9 kOhm 9 kOh Max. modulation frequency 0.001 kHz 300 k	Line width	0.011 mm	
Diameter laser module 25/28 m Module length 82.6 m Installation length 186.6 m Cable length 1.5 Connector type Lumberg SV40 IEC 61076-2-1 Supply voltage 12 ± 0.5 Max. current consumption 0.3 Working temperature 15 - 40 Modulation inputs Analog T Input resistance 9 kOhm 9 kOh Max. modulation frequency 0.001 kHz 300 k	Rayleigh range	0.368 mm	
Module length82.6 mInstallation length186.6 mCable length1.5Connector typeLumberg SV40 IEC 61076-2-1Supply voltage12 ± 0.5Max. current consumption0.3Working temperature15 - 40Modulation inputsAnalogTInput resistance9 kOhm9 kOhMax. modulation frequency0.001 kHz300 k	Edge intensity	18 %	
Installation length Cable length Connector type Lumberg SV40 IEC 61076-2-1 Supply voltage Max. current consumption Working temperature Modulation inputs Input resistance 9 kOhm 9 kOh Max. modulation frequency 186.6 n 1.5 Lumberg SV40 IEC 61076-2-1 12 ± 0.5 13 ± 0.5 14 ± 0.5 15 - 40 15 - 40 16 modulation inputs Analog Toleration inputs Analog Toleration inputs Input resistance 9 kOhm 9 kOh 10 0.001 kHz 10 0.001 kHz 10 0.001 kHz	Diameter laser module	25/28 mm	
Cable length1.5Connector typeLumberg SV40 IEC 61076-2-1Supply voltage12 ± 0.5Max. current consumption0.3Working temperature15 - 40Modulation inputsAnalogTInput resistance9 kOhm9 kOhMax. modulation frequency0.001 kHz300 k	Module length	82.6 mm	
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Supply voltage 12 ± 0.5 Max. current consumption 0.3 Working temperature 15 - 40 Modulation inputs Analog T Input resistance 9 kOhm 9 kOh Max. modulation frequency 0.001 kHz 300 k	Cable length	1.5 m	
Max. current consumption0.3Working temperature15 - 40Modulation inputsAnalogTInput resistance9 kOhm9 kOhMax. modulation frequency0.001 kHz300 k	Connector type	Lumberg SV40 IEC 61076-2-106	
Working temperature15 - 40Modulation inputsAnalogTInput resistance9 kOhm9 kOhMax. modulation frequency0.001 kHz300 k	Supply voltage	12 ± 0.5 V	
Modulation inputsAnalogTInput resistance9 kOhm9 kOhMax. modulation frequency0.001 kHz300 k	Max. current consumption	0.3 A	
Input resistance 9 kOhm 9 kOh Max. modulation frequency 0.001 kHz 300 k	Working temperature	15 - 40 °C	
Max. modulation frequency 0.001 kHz 300 k	Modulation inputs	Analog	TTL
· · · · · · · · · · · · · · · · · · ·	Input resistance	9 kOhm	9 kOhm
Modulation delay ON/OFF 2000/500 μs 0.5/0.2	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	Rise / Fall time	200000/200000 μs	0.8/0.3 μs
Noise (< 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

PS120516E Power Supply 12 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

Semi-telecentric Macro Line

Gaussian intensity distribution

Constant line length ca. 2 mm

Extended depth of focus

LASER MODULES

SERIES LNC-13LT Semi-telecentric Micro Line

Uniform intensity distribution

Constant line length 15 mm

Low noise

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

Gaussian intensity distribution

Constant line length ca. 4.8 mm

Low noise



This is a printout of the page https://sukhamburg.com/products/details/LNC-5LT-75-2_56CM-520-14-O11-A7_5-HP-4 from 4/24/2024

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