# LNC-5LT-330-2+56CM-685-19-H13-A8-H-6

Semi-telecentric Micro Line Generator



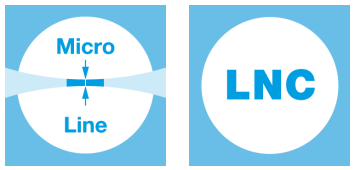
## FEATURES

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

- Line length: 2.4 mm
- Line width: 60 µm
- Wavelength: 685 nm
- Working distance: 324 mm
- Low noise laser module (0.1 % RMS, @<1 MHz)

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- 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))




## DESCRIPTION

The laser diode beam source type LNC-5LT-330-2+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 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.

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-330-2+56CM-685-19-H13-A8-H-6

| | | |
|---|---|---|
| **Series** | | 5LT |
| **Order Code** | | LNC-5LT-330-2+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** | | 324-324 mm |
| **Working distance** | | 324 mm |
| **Line length** | | 2.4 mm |
| **Line width** | | 0.06 mm |
| **Rayleigh range** | | 8.24 mm |
| **Edge intensity** | | 15 % |
| **Diameter laser module** | | 25/28 mm |
| **Module length** | | 82.6 mm |
| **Installation length** | | 436.6 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 |
| **Noise (< 1 MHZ RMS)** | | 0.1 % |

## DOWNLOADS

930412000141.pdf.pdf

## 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**

- 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-330-2_56CM-685-19-H13-A8-H-6 from 3/28/2024

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