# 5LT-150-1+55CM-445-76-G02-A7.5-PS-7

Semi-telecentric Micro Line Generator



## FEATURES

Semi-telecentric laser line with constant line length of 4.8 mm.

- Line length: 4.8 mm
- Line width: 55 µm
- Wavelength: 445 nm
- Working distance: 145 mm

- Micro Line Generator for small laser line widths and high power density in the focal plane
- With RS232 interface




## DESCRIPTION

The laser diode beam source type 5LT-150-1+55CM-445-76-G02-A7.5-PS-7 produces a semi-telecentric laser line with 4.8 mm line length. The intensity profile is Gaussian in line direction clipped by an aperture with an edge intensity of 2 %. The line width is constant along the laser line. Across the laser line the intensity distribution is Gaussian.

The laser has integrated electronics type PS with micro-controller for control of the laser output power and serial interface (RS232). 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

5LT-150-1+55CM-445-76-G02-A7.5-PS-7

| | | |
|---|---|---|
| **Series** | | 5LT |
| **Order Code** | | 5LT-150-1+55CM-445-76-G02-A7.5-PS-7 |
| **Line profile** | | Gaussian Intensity Distribution |
| **Line type** | | Laser Micro Line |
| **Wavelength** | | 445 +15/-5 nm |
| **Laser output power** | | 76 mW |
| **Laser safety class** | | 3B |
| **Focussing range** | | 145-145 mm |
| **Working distance** | | 145 mm |
| **Line length** | | 4.8 mm |
| **Line width** | | 0.055 mm |
| **Rayleigh range** | | 10.6 mm |
| **Edge intensity** | | 2 % |
| **Diameter laser module** | | 25/28 mm |
| **Module length** | | 73.1 mm |
| **Installation length** | | 248.1 mm |
| **Cable length** | | 1.5 m |
| **Connector type** | | Lumberg SV70 IEC 61076-2-106 |
| **Supply voltage** | | 5 ± 0.2 V |
| **Max. current consumption** | | 0.5 A |
| **Working temperature** | | 15 - 40 °C |
| **Modulation inputs** | Analog | TTL |
| **Input resistance** | 9 kOhm | 9 kOhm |
| **Max. modulation frequency** | 0.001 kHz | 250 kHz |
| **Modulation delay ON/OFF** | 3000/3000 µs | 0.6/0.2 µs |
| **Rise / Fall time** | 200000/200000 µs | 0.2/0.2 µs |
| **Interface** | | RS232 |

## DOWNLOADS

930412000106.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 |
| **PS051007E** | Power Supply 5 V for laser modules with RS232 interface |

## RELATED PRODUCTS

**LASER MODULES SERIES 5LTM-1**
- Semi-telecentric Macro Line
- Gaussian intensity distribution
- Constant line length ca. **4.8 mm**
- Extended depth of focus

**LASER MODULES SERIES LNC-5LTM-1**
- Semi-telecentric Macro Line
- Gaussian intensity distribution
- Constant line length ca. **4.8 mm**
- Extended depth of focus
- Low noise

**LASER MODULES SERIES 13LT**
- Semi-telecentric Micro Line
- Uniform intensity distribution
- Constant line length **15 mm**

**LASER MODULES SERIES 5LT-2+25CM**
- **Compact** semi-telecentric Micro Line
- Gaussian intensity distribution
- Constant line length ca. **2 mm**

**LASER MODULES SERIES 5LT-1**
- Semi-telecentric Micro Line
- Gaussian intensity distribution
- Constant line length ca. **4.8 mm**

**LASER MODULES**
**SERIES 5LT-2**

- Semi-telecentric Micro Line
- Gaussian intensity distribution
- Constant line length ca. **2 mm**

This is a printout of the page https://sukhamburg.com/products/details/5LT-150-1_55CM-445-76-G02-A7_5-PS-7 from 3/28/2024

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