

## 5LTM-150-11+55CM-445-61-G02-A7.5-PS-7

Semi-telecentric Macro Line Generator



### FEATURES

Semi-telecentric laser line with constant line length of 4.8 mm and extended depth of focus.

- Line length: 4.8 mm
- Line width: 99  $\mu\text{m}$
- Wavelength: 445 nm
- Working distance: 139 mm
- Depth of focus: 44.6 mm

- Macro Line Generator for extended depth of focus
- With RS232 interface



## DESCRIPTION

The laser diode beam source type 5LTM-150-11+55CM-445-61-G02-A7.5-PS-7 produces a semi-telecentric laser line with 4.8 mm line length and extended depth of focus. 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 approx. 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

5LTM-150-11+55CM-445-61-G02-A7.5-PS-7

Series	5LTM	
Order Code	5LTM-150-11+55CM-445-61-G02-A7.5-PS-7	
Line profile	Gaussian Intensity Distribution	
Line type	Laser Macro Line	
Wavelength	445 +15/-5 nm	
Laser output power	61 mW	
Laser safety class	3B	
Focussing range	139-139 mm	
Working distance	139 mm	
Line length	4.8 mm	
Line width	0.099 mm	
Depth of focus	44.6 mm	
Edge intensity	2 %	
Diameter laser module	25/28 mm	
Module length	78.5 mm	
Installation length	247.5 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	

## 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 5LT-2

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

### 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 13LTM

- Semi-telecentric Macro Line
- Uniform intensity distribution
- Constant line length **15 mm**
- Extended depth of focus

### LASER MODULES SERIES 5LTM-1+25CM

- **Compact** semi-telecentric Macro Line
- Gaussian intensity distribution
- Constant line length ca. **4.8 mm**
- Extended depth of focus

### 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 5LTM-2+25CM

- **Compact** semi-telecentric Macro Line
- Gaussian intensity distribution
- Constant line length ca. **2 mm**
- Extended depth of focus

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## 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](mailto:info@sukhamburg.de)**

**[www.sukhamburg.com](http://www.sukhamburg.com)**

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