

## 5LT-150-1+55CM-488-42-O09-A7.5-P-6

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: 60  $\mu\text{m}$
- Wavelength: 488 nm
- Working distance: 145 mm

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



## DESCRIPTION

The laser diode beam source type 5LT-150-1+55CM-488-42-O09-A7.5-P-6 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 19 %. The line width is constant along the laser line. Across the laser line the intensity distribution is Gaussian.

The laser has integrated electronics [type P](#) with micro-controller for control of the laser output power. 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-488-42-O09-A7.5-P-6

<b>Series</b>	5LT	
<b>Order Code</b>	5LT-150-1+55CM-488-42-O09-A7.5-P-6	
<b>Line profile</b>	Gaussian Intensity Distribution	
<b>Line type</b>	Laser Micro Line	
<b>Wavelength</b>	488 +2/-2 nm	
<b>Laser output power</b>	42 mW	
<b>Laser safety class</b>	3B	
<b>Focussing range</b>	145-145 mm	
<b>Working distance</b>	145 mm	
<b>Line length</b>	4.8 mm	
<b>Line width</b>	0.06 mm	
<b>Rayleigh range</b>	11.6 mm	
<b>Edge intensity</b>	19 %	
<b>Diameter laser module</b>	25/28 mm	
<b>Module length</b>	73.1 mm	
<b>Installation length</b>	248.1 mm	
<b>Cable length</b>	1.5 m	
<b>Connector type</b>	Lumberg SV50 IEC 61076-2-106	
<b>Supply voltage</b>	5 ± 0.2 V	
<b>Max. current consumption</b>	0.5 A	
<b>Working temperature</b>	15 - 40 °C	
<b>Modulation inputs</b>	Analog	TTL
<b>Input resistance</b>	9 kOhm	9 kOhm
<b>Max. modulation frequency</b>	0.01 kHz	250 kHz
<b>Modulation delay ON/OFF</b>	3000/3000 µs	0.5/0.2 µs
<b>Rise / Fall time</b>	40000/40000 µs	0.5/0.5 µs

## 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
PS051003E	Power Supply 5 V

## 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**

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