

## 5LT-150-1+55CM-639-18-H18-A8-CS-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: 64  $\mu\text{m}$
- Wavelength: 639 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
  - With RS232 interface



## DESCRIPTION

The laser diode beam source type 5LT-150-1+55CM-639-18-H18-A8-CS-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 40 %. The line width is constant along the laser line. Across the laser line the intensity distribution is Gaussian.

The laser has integrated electronics [type CS](#) 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-639-18-H18-A8-CS-7

|                           |                                   |            |
|---------------------------|-----------------------------------|------------|
| Series                    | 5LT                               |            |
| Order Code                | 5LT-150-1+55CM-639-18-H18-A8-CS-7 |            |
| Line profile              | Gaussian Intensity Distribution   |            |
| Line type                 | Laser Micro Line                  |            |
| Wavelength                | 639 +10/-10 nm                    |            |
| Laser output power        | 18 mW                             |            |
| Laser safety class        | 3B                                |            |
| Focussing range           | 145-145 mm                        |            |
| Working distance          | 145 mm                            |            |
| Line length               | 4.8 mm                            |            |
| Line width                | 0.064 mm                          |            |
| Rayleigh range            | 10.2 mm                           |            |
| Edge intensity            | 40 %                              |            |
| 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  | 0.25 A                            |            |
| Working temperature       | 0 - 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                      | 0.5/0.2 µs |
| Rise / Fall time          | 200000/200000 µs                  | 0.8/0.4 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**

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