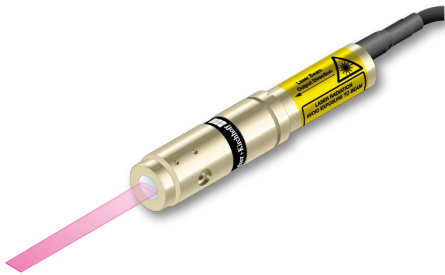


5LT-50-1+25CM-405-14-Y07-A7.5-B-4

Semi-telecentric compact Micro Line Generator

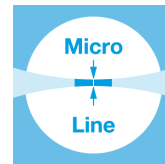


FEATURES

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

- Line length: 4.8 mm
- Line width: 14 μm
- Wavelength: 405 nm
- Working distance: 45 mm

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



DESCRIPTION

The laser diode beam source type 5LT-50-1+25CM-405-14-Y07-A7.5-B-4 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 9 %. The line width is constant along the laser line. Across the laser line the intensity distribution is Gaussian.

The laser has integrated electronics [type B](#) for control of the laser output power. The output power can be controlled using the [modulation input port \(TTL\)](#) 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-50-1+25CM-405-14-Y07-A7.5-B-4

| | |
|---------------------------|-----------------------------------|
| Series | 5LT |
| Order Code | 5LT-50-1+25CM-405-14-Y07-A7.5-B-4 |
| Line profile | Gaussian Intensity Distribution |
| Line type | Laser Micro Line |
| Wavelength | 405 +5/-5 nm |
| Laser output power | 14 mW |
| Laser safety class | 3B |
| Focussing range | 45-45 mm |
| Working distance | 45 mm |
| Line length | 4.8 mm |
| Line width | 0.014 mm |
| Rayleigh range | 0.726 mm |
| Edge intensity | 9 % |
| Diameter laser module | 12 mm |
| Module length | 60.7 mm |
| Installation length | 135.7 mm |
| Cable length | 1.5 m |
| Connector type | Lumberg SV40 IEC 61076-2-106 |
| Supply voltage | 12 ± 0.5 V |
| Max. current consumption | 0.16 A |
| Working temperature | 0 - 40 °C |
| Modulation inputs | TTL |
| Input resistance | 110 kOhm |
| Max. modulation frequency | 0.2 kHz |
| Modulation delay ON/OFF | 500/500 µs |
| Rise / Fall time | 10/20 µs |

DOWNLOADS

[921120000614.pdf](#)

ACCESSORIES

9D-12 Screwdriver WS 1.2

PS120516E Power Supply 12 V

RELATED PRODUCTS

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 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-50-1_25CM-405-14-Y07-A7_5-B-4 from 4/25/2024

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