

# 5LT-50-2+55CM-515-71-X17-A7.5-PS-7

Semi-telecentric Micro Line Generator



#### **FEATURES**

Semi-telecentric laser line with constant line length of 2.4 mm.

Line length: 2.4 mm
Line width: 7 μm
Wavelength: 515 nm
Working distance: 45 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-50-2+55CM-515-71-X17-A7.5-PS-7 produces a semi-telecentric laser line with 2.4 mm line length. In this case the line length is given on the 13.5%-level. The intensity profile is Gaussian in line direction and the line is truncated at 4.8 mm. The line width is constant along the laser line. Across the laser line the intensity distribution is Gaussian.

The laser has integrated electronics <u>type PS</u> with micro-controller for control of the laser output power and serial interface (RS232). The output power can be controlled using the <u>modulation input ports (TTL and analog)</u> 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-50-2+55CM-515-71-X17-A7.5-PS-7

Order Code         5LT-50-2+55CM-515-71-X17-A7.5-PS-7           Line profile         Gaussian Intensity Distribution           Line type         Laser Micro Line           Wavelength         515+5/-5 nm           Laser output power         71 mW           Laser safety class         3B           Focussing range         45-45 mm           Working distance         45 mm           Line length         0.007 mm           Rayleigh range         0.162 mm           Edge intensity         15 %           Diameter laser module         25/28 mm           Module length         73.1 mm           Installation length         148.1 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	Series		5LT	
Line type         Laser Micro Line           Wavelength         515 +5/-5 nm           Laser output power         71 mW           Laser safety class         3B           Focussing range         45-45 mm           Working distance         45 mm           Line length         2.4 mm           Line width         0.007 mm           Rayleigh range         0.162 mm           Edge intensity         15 %           Diameter laser module         25/28 mm           Module length         73.1 mm           Installation length         148.1 mm           Cable length         1.5 m           Connector type         Lumberg SV70 IEC 61076-2-106           Supply voltage         5 ± 0.2 V           Max. current consumption         0.5A           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	Order Code	5LT-50-2+55CM-515-71-X17-A7.5-PS-7		
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Rise / Fall time         200000/200000 μs         0.2/0.2 μs	Max. modulation frequency	0.001 kHz	250 kHz	
	Modulation delay ON/OFF	3000/3000 μs	0.6/0.2 μs	
Interface RS232	Rise / Fall time	200000/200000 μs	0.2/0.2 μs	
	Interface	RS232		



## **DOWNLOADS**



# **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

SBS 070701-USB For laser diode modules with RS232 interface

### **RELATED PRODUCTS**

LASER MODULES SERIES 5LTM-2

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

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 13LT

- Semi-telecentric Micro Line
- Uniform intensity distribution
- Constant line length 15 mm

LASER MODULES SERIES 5LT-1+25CM

- Compact semi-telecentric Micro Line
- Gaussian intensity distribution
- Constant line length ca. 4.8 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+25CM

- Compact semi-telecentric Micro Line
- Gaussian intensity distribution
- Constant line length ca. 2 mm

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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 www.sukhamburg.com

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