

## 5LT-250-1+55CM-1550-25-Q04-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: 223 μm
Wavelength: 1550 nm
Working distance: 250 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-250-1+55CM-1550-25-Q04-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 37 %. 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 P</u> with micro-controller for control of the laser output power. 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-250-1+55CM-1550-25-Q04-A7.5-P-6

Series		5LT
Order Code	5LT-250-1+55CM-1550-25-Q04-A7.5-P-6	
Line profile	Gaussian Intensity Distribution	
Line type	Laser Micro Line	
Wavelength	1550 +20/-20 nm	
Laser output power	25 mW	
Laser safety class	3R	
Focussing range	250-250 mm	
Working distance	250 mm	
Line length	4.8 mm	
Line width	0.223 mm	
Rayleigh range	50.3 mm	
Edge intensity	37 %	
Diameter laser module	25/28 mm	
Module length	73.1 mm	
Installation length	353.1 mm	
Cable length	1.5 m	
Connector type	Lumberg SV50 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	0.01 kHz	250 kHz
Modulation delay ON/OFF	3000/3000 μs	0.5/0.2 μs
Rise / Fall time	40000/40000 μs	0.5/0.5 μs

### **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

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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#### **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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