

## 5LT-75-2+55CM-1550-25-Q04-A7.5-P-6

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: 33 μm
Wavelength: 1550 nm
Working distance: 74 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-75-2+55CM-1550-25-Q04-A7.5-P-6 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  $\underline{type\ P}$  with micro-controller for control of the laser output power. The output power can be controlled using the  $\underline{modulation\ input\ ports\ (TTL\ and\ analog)}$  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-75-2+55CM-1550-25-Q04-A7.5-P-6

Line profile Line type Laser Micro Line Wavelength Line type Laser output power Laser safety class Focussing range Working distance Line length Line width Diameter laser module Line dight Rayleigh range Edge intensity Diameter laser module Module length Tonnector type Lumberg SV50 IEC 61076-2-106 Supply voltage Max. current consumption Working temperature Line type Laser Micro Line Laser Micro Laser Mic	Series		5LT
Line type Laser Micro Line Wavelength 1550 +20/-20 nn Laser output power 25 mW Laser safety class 3F Focussing range 74-74 mn Working distance 74 mn Line length 2.4 mn Line width 0.033 mn Rayleigh range 1.1 mn Edge intensity 37 % Diameter laser module 25/28 mn Module length 73.1 mn Installation length 177.1 mn Cable length 1,5 m Connector type Lumberg SV50 IEC 61076-2-100 Supply voltage 5 ± 0.2 N Max. current consumption 0.5 A Working temperature 15 - 40 °C Modulation inputs Analog TTI Input resistance 9 kOhm 9 kOhm Max. modulation frequency 0.01 kHz 250 kHz	Order Code	5LT-75-2+55CM-1550-25-Q04-A7.5-P-6	
Wavelength         1550 +20/-20 nm           Laser output power         25 mW           Laser safety class         3F           Focussing range         74-74 mm           Working distance         74 mm           Line length         2.4 mm           Line width         0.033 mm           Rayleigh range         1.1 mm           Edge intensity         37 %           Diameter laser module         25/28 mm           Module length         73.1 mm           Installation length         1.5 m           Cable length         1.5 m           Connector type         Lumberg SV50 IEC 61076-2-100           Supply voltage         5 ± 0.2 V           Max. current consumption         0.5 A           Working temperature         15 - 40 °C           Modulation inputs         Analog         TTI           Input resistance         9 kOhm         9 kOhm           Max. modulation frequency         0.01 kHz         250 kHz	Line profile	Gaussian Intensity Distribution	
Laser output power         25 mW           Laser safety class         3F           Focussing range         74-74 mm           Working distance         74 mm           Line length         2.4 mm           Line width         0.033 mm           Rayleigh range         1.1 mm           Edge intensity         37 %           Diameter laser module         25/28 mm           Module length         73.1 mm           Installation length         177.1 mm           Cable length         1.5 m           Connector type         Lumberg SV50 IEC 61076-2-100           Supply voltage         5 ± 0.2 V           Max. current consumption         0.5 A           Working temperature         15 - 40 °C           Modulation inputs         Analog         TTI           Input resistance         9 kOhm         9 kOhm           Max. modulation frequency         0.01 kHz         250 kHz	Line type	Laser Micro Line	
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Edge intensity  Diameter laser module  25/28 mm  Module length  73.1 mm  Installation length  177.1 mm  Cable length  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  TIL  Input resistance  9 kOhm  9 kOhm  Max. modulation frequency  0.01 kHz  250 kHz	Line width	0.033 mm	
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Max. modulation frequency 0.01 kHz 250 kHz	Modulation inputs	Analog	TTL
	Input resistance	9 kOhm	9 kOhm
Modulation delay ON/OFF         3000/3000 μs         0.5/0.2 μs	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	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 Semi-telecentric Macro Line **SERIES 5LTM-2** Gaussian intensity distribution

Constant line length ca. 2 mm

Extended depth of focus

LASER MODULES Semi-telecentric Macro Line **SERIES LNC-5LTM-2** 

Gaussian intensity distribution

Constant line length ca. 2 mm Extended depth of focus

Low noise

**LASER MODULES** Semi-telecentric Micro Line **SERIES 13LT** 

Uniform intensity distribution

Constant line length 15 mm

LASER MODULES Compact semi-telecentric Micro Line

SERIES 5LT-1+25CM Gaussian intensity distribution

Constant line length ca. 4.8 mm

LASER MODULES ■ Semi-telecentric Micro Line **SERIES 5LT-1** 

Gaussian intensity distribution

Constant line length ca. 4.8 mm

LASER MODULES Compact semi-telecentric Micro Line

SERIES 5LT-2+25CM 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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