

# 5LT-250-1+55CM-660-105-M25-A8-PS-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: 89 μm
Wavelength: 660 nm
Working distance: 250 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-250-1+55CM-660-105-M25-A8-PS-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 5 %. 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-250-1+55CM-660-105-M25-A8-PS-7

Order Code         5LT-250-1+55CM-660-105-M25-A8-PS-7           Line profile         Gaussian Intensity Distribution           Line type         Laser Micro Line           Wavelength         660 +4/-6 nm           Laser output power         105 mW           Laser safety class         3B           Focussing range         250-250 mm           Working distance         250 mm           Line length         4.8 mm           Line width         0.089 mm           Rayleigh range         18.8 mm           Edge intensity         5 %           Diameter laser module         25/28 mm           Module length         73.1 mm           Installation length         353.1 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         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         0.5/0.2 μs </th <th>Series</th> <th></th> <th>5LT</th>	Series		5LT	
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Wavelength         660 + 4/-6 nm           Laser output power         105 mW           Laser safety class         3B           Focussing range         250-250 mm           Working distance         250 mm           Line length         4.8 mm           Line width         0.089 mm           Rayleigh range         18.8 mm           Edge intensity         5%           Diameter laser module         25/28 mm           Module length         73.1 mm           Installation length         353.1 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         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         0.5/0.2 μs           Rise / Fall time         200000/200000 μs         0.8/0.4 μs	Line profile	Gaussian Intensity Distribution		
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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         0.5/0.2 μs           Rise / Fall time         200000/200000 μs         0.8/0.4 μs	Supply voltage	5 ± 0.2 V		
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Interface RS232	Rise / Fall time	200000/200000 μs	0.8/0.4 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

# **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

This is a printout of the page <a href="https://sukhamburg.com/products/details/5LT-250-1">https://sukhamburg.com/products/details/5LT-250-1</a> 55CM-660-105-M25-A8-PS-7 from 4/26/2024

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