

### 5LP40-S50+55CM-660-98-M25-A8-PS-7

Micro Line Generator with a large fan angle



#### **FEATURES**

Laser line with a large fan angle and Gaussian intensity distribution.

Line length: 28 mm
Line width: 18 μm
Wavelength: 660 nm
Working distance: 46 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 5LP40-S50+55CM-660-98-M25-A8-PS-7 has a fan angle of 40°.

The intensity profile is Gaussian in line direction clipped by an aperture with an edge intensity of 4 %. 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.

The working distance can be adjusted by adjusting the focus setting. Please note that beam parameters like line length and line width increase proportionally to the working distance. A fine-adjustment of the distance between laser and target is recommended for fine-focusing.



# **TECHNICAL DATA**

5LP40-S50+55CM-660-98-M25-A8-PS-7

Series		5LP
Order Code	5LP40-S50+55CM-660-98-M25-A8-PS-7	
Line profile	Gaussian Intensity Distribution	
Line type	Laser Micro Line	
Wavelength	660 +4/-6 nm	
Laser output power	98 mW	
Laser safety class	3B	
Fan angle α	40 deg	
Focussing range	35-70 mm	
Working distance	46 mm	
Line length	28 mm	
Line width	0.018 mm	
Rayleigh range	0.752 mm	
Edge intensity	4 %	
Diameter laser module	25/28 mm	
Module length	90.1 mm	
Installation length	166.1 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
Interface	RS232	

# **ACCESSORIES**



50HD-15 Hex key WS 1.5

9D-12 Screwdriver WS 1.2

13MK-25-36-10-F Mounting Console with flat base plate

Mounting Console with base plate with dovetail 13MK-25-36-10-M

profile

PS051007E Power Supply 5 V for laser modules with RS232

interface

### **RELATED PRODUCTS**

LASER MODULES Macro Line, large fan angle **SERIES 5LPM** Gaussian intensity distribution

Extended depth of focus

Micro Line, large fan angle LASER MODULES **SERIES LNC-5LP** Gaussian intensity distribution

Low noise

LASER MODULES Micro Line Generator, fan angle **SERIES 13LR** 

Uniform intensity distribution

LASER MODULES Micro Line, small fan angle **SERIES 13LN** Uniform intensity distribution

Thin lines

**LASER MODULES** Compact Micro Line, small fan angle

**SERIES 5LM+25CM** Gaussian intensity distribution

LASER MODULES ■ Compact Micro Line, large fan angle

**SERIES 5LP+25CM** Gaussian intensity distribution

LASER MODULES Micro Line, small fan angle

**SERIES 5LM** Gaussian intensity distribution



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