

# 5LP40-S150+55CM-685-37-H13-A8-CS-7

Micro Line Generator with a large fan angle



#### **FEATURES**

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

Line length: 101 mm
Line width: 58 μm
Wavelength: 685 nm
Working distance: 147 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-S150+55CM-685-37-H13-A8-CS-7 has a fan angle of 40°.

The intensity profile is Gaussian in line direction clipped by an aperture with an edge intensity of 14 %. 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 CS</u> 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-S150+55CM-685-37-H13-A8-CS-7

Series 5LP		
Order Code	5LP40-S150+55CM-685-37-H13-A8-CS-7	
Line profile	Gaussian Intensity Distribution	
Line type	Laser Micro Line	
Wavelength	685 +10/-10 nm	
Laser output power	37 mW	
Laser safety class	3B	
Fan angle $\alpha$	40 deg	
Focussing range	125-260 mm	
Working distance	147 mm	
Line length	101 mm	
Line width	0.058 mm	
Rayleigh range	7.78 mm	
Edge intensity	14 %	
Diameter laser module	25/28 mm	
Module length	90.1 mm	
Installation length	267.1 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	0 - 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

**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 5LPM Macro Line, large fan angleGaussian intensity distribution

Extended depth of focus

LASER MODULES
SERIES LNC-5LP

Micro Line, large fan angleGaussian intensity distribution

Low noise

LASER MODULES SERIES 13LR Micro Line Generator, fan angleUniform intensity distribution

LASER MODULES SERIES 13LN Micro Line, small fan angleUniform intensity distribution

Thin lines

LASER MODULES SERIES 5LM+25CM ■ Compact Micro Line, small fan angle

Gaussian intensity distribution

LASER MODULES
SERIES 5LP+25CM

■ Compact Micro Line, large fan angle

Gaussian intensity distribution

LASER MODULES SERIES 5LM Micro Line, small fan angle

Gaussian intensity distribution



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