5LP40-S150+55CM-450-53-O06-A7.5-P-6

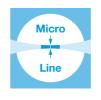
Micro Line Generator with a large fan angle



FEATURES

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

- Line length: 101 mm
- Line width: 52 µm
- Wavelength: 450 nm
- Working distance: 147 mm
- Micro Line Generator for small laser line widths and high power density in the focal plane



DESCRIPTION

The laser diode beam source type 5LP40-S150+55CM-450-53-O06-A7.5-P-6 has a fan angle of 40°.

The intensity profile is Gaussian in line direction clipped by an aperture with an edge intensity of 15 %. 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.

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-450-53-O06-A7.5-P-6

Series		5LP
Order Code	5LP40-S150+55CM-450-53-O06-A7.5-P-6	
Line profile	Gaussian Intensity Distribution	
Line type	Laser Micro Line	
Wavelength	450 +10/-10 nm	
Laser output power	53 mW	
Laser safety class	3В	
Fan angle α	40 deg	
Focussing range	125-260 mm	
Working distance	147 mm	
Line length	101 mm	
Line width	0.052 mm	
Rayleigh range	9.31 mm	
Edge intensity	15 %	
Diameter laser module	25/28 mm	
Module length	90.1 mm	
Installation length	267.1 mm	
Cable length	1.5 m	
Connector type	Lumberg SV50 IEC 61076-2-106	
Supply voltage	5 ± 0.2 V	
Max. current consumption	0.5A	
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

ACCESSORIES

50HD-15

Hex key WS 1.5



DATA SHEET

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 5LPM

LASER MODULES SERIES LNC-5LP

LASER MODULES SERIES 13LR

LASER MODULES SERIES 13LN

LASER MODULES SERIES 5LM+25CM

LASER MODULES SERIES 5LP+25CM

LASER MODULES SERIES 5LM

	Gaussian intensity distribution Extended depth of focus
-	Micro Line, large fan angle Gaussian intensity distribution Low noise
	Micro Line Generator, fan angle Uniform intensity distribution
•	Micro Line, small fan angle Uniform intensity distribution Thin lines
	Compact Micro Line, small fan angle Gaussian intensity distribution
	Compact Micro Line, large fan angle Gaussian intensity distribution
	Micro Line, small fan angle Gaussian intensity distribution

Macro Line, large fan angle



DATA SHEET

This is a printout of the page <u>https://sukhamburg.com/products/details/5LP40-S150_55CM-450-53-O06-A7_5-P-6</u> from 5/5/2024

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