

## 5LP80-S150+55CM-445-71-G02-A7.5-PS-7

Micro Line Generator with a large fan angle



### FEATURES

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

- Line length: 250 mm
- Line width: 55  $\mu\text{m}$
- Wavelength: 445 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 5LP80-S150+55CM-445-71-G02-A7.5-PS-7 has a fan angle of 84°.

The intensity profile is Gaussian in line direction clipped by an aperture with an edge intensity of 2 %. The line width is constant along the laser line. Across the laser line the intensity distribution is Gaussian.

The laser has integrated electronics [type PS](#) with micro-controller for control of the laser output power and serial interface (RS232). The output power can be controlled using the [modulation input ports \(TTL and analog\)](#) 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

5LP80-S150+55CM-445-71-G02-A7.5-PS-7

Series	5LP	
Order Code	5LP80-S150+55CM-445-71-G02-A7.5-PS-7	
Line profile	Gaussian Intensity Distribution	
Line type	Laser Micro Line	
Wavelength	445 +15/-5 nm	
Laser output power	71 mW	
Laser safety class	3B	
Fan angle $\alpha$	84 deg	
Focussing range	125-260 mm	
Working distance	147 mm	
Line length	250 mm	
Line width	0.055 mm	
Rayleigh range	10.6 mm	
Edge intensity	2 %	
Diameter laser module	25/28 mm	
Module length	86.1 mm	
Installation length	263.1 mm	
Cable length	1.5 m	
Connector type	Lumberg SV70 IEC 61076-2-106	
Supply voltage	5 $\pm$ 0.2 V	
Max. current consumption	0.5 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 $\mu$ s	0.6/0.2 $\mu$ s
Rise / Fall time	200000/200000 $\mu$ s	0.2/0.2 $\mu$ s
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 angle
- Gaussian intensity distribution
- Extended depth of focus

### LASER MODULES SERIES LNC-5LP

- Micro Line, **large** fan angle
- Gaussian intensity distribution
- Low noise

### LASER MODULES SERIES 13LR

- Micro Line Generator, fan angle
- Uniform intensity distribution

### LASER MODULES SERIES 13LN

- Micro Line, **small** fan angle
- Uniform 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

This is a printout of the page [https://sukhamburg.com/products/details/5LP80-S150\\_55CM-445-71-G02-A7\\_5-PS-7](https://sukhamburg.com/products/details/5LP80-S150_55CM-445-71-G02-A7_5-PS-7) from 4/23/2024

## 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](mailto:info@sukhamburg.de)

[www.sukhamburg.com](http://www.sukhamburg.com)

## LEGAL NOTICE

**Copyright 2020 Schäfter+Kirchhoff GmbH. All rights reserved.**

Text, image, graphic, sound, video and animation files and their arrangement on Schäfter+Kirchhoff GmbH webpages are protected by copyright and other protective laws. The content may not be copied for commercial use or reproduced, modified or used on other websites. [\[more\]](#)