5LP80-S50+55CM-405-82-X15-A7.5-P-6

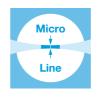
Micro Line Generator with a large fan angle



FEATURES

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

- Line length: 72 mm
- Line width: 13 µm
- Wavelength: 405 nm
- Working distance: 46 mm
- Micro Line Generator for small laser line widths and high power density in the focal plane



DESCRIPTION

The laser diode beam source type 5LP80-S50+55CM-405-82-X15-A7.5-P-6 has a fan angle of 84° .

The intensity profile is Gaussian in line direction clipped by an aperture with an edge intensity of 10 %. 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

5LP80-S50+55CM-405-82-X15-A7.5-P-6

Series		5LP
Order Code	5LP80-S50+55CM-405-82-X15-A7.5-P-6	
Line profile	Gaussian Intensity Distribution	
Line type	Laser Micro Line	
Wavelength	405 +5/-5 nm	
Laser output power	82 mW	
Laser safety class	3В	
Fan angle α	84 deg	
Focussing range	35-70 mm	
Vorking distance 46 mm		
Line length	72 mm	
Line width	0.013 mm	
Rayleigh range	0.648 mm	
Edge intensity	10 %	
Diameter laser module	25/28 mm	
Module length	86.1 mm	
Installation length	162.1 mm	
Cable length	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/5LP80-S50_55CM-405-82-X15-A7_5-P-6</u> from 5/3/2024

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 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]

