

5LM8-S325+55CM-520-54-O11-A7.5-P-6

Micro Line Generator with a fan angle



FEATURES

Laser line with a fan angle and Gaussian intensity distribution.

Line length: 47.5 mm
Line width: 156 μm
Wavelength: 520 nm
Working distance: 313 mm

 Micro Line Generator for small laser line widths and high power density in the focal plane



DESCRIPTION

The laser diode beam source type 5LM8-S325+55CM-520-54-O11-A7.5-P-6 has a fan angle of 8° .

The intensity profile is Gaussian in line direction clipped by an aperture with an edge intensity of 18 %. The line width is constant along the laser line. Across the laser line the intensity distribution is Gaussian.

The laser has integrated electronics $\underline{type\ P}$ with micro-controller for control of the laser output power. The output power can be controlled using the $\underline{modulation\ input\ ports\ (TTL\ and\ analog)}$ 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

5LM8-S325+55CM-520-54-O11-A7.5-P-6

Series 5LM		
Order Code	5LM8-S325+55CM-520-54-O11-A7.5-P-6	
Line profile	Gaussian Intensity Distribution	
Line type	Laser Micro Line	
Wavelength	520 +10/-5 nm	
Laser output power	54 mW	
Laser safety class	3В	
Fan angle α	8 deg	
Focussing range	255-425 mm	
Working distance	313 mm	
Line length	47.5 mm	
Line width	0.156 mm	
Rayleigh range	73.8 mm	
Edge intensity	18 %	
Diameter laser module	25/28 mm	
Module length	77.3 mm	
Installation length	420.3 mm	
Cable length	1.5 m	
Connector type	Lumberg SV50 IEC 61076-2-106	
Supply voltage	5 ± 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	0.01 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

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

PS051003E Power Supply 5 V

RELATED PRODUCTS

LASER MODULES ■ Macro Line, small fan angle **SERIES 5LMM** Gaussian intensity distribution

Extended depth of focus

LASER MODULES Micro Line, small fan angle **SERIES LNC-5LM**

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, large fan angle

SERIES 5LP+25CM Gaussian intensity distribution

LASER MODULES ■ Compact Micro Line, small fan angle

SERIES 5LM+25CM Gaussian intensity distribution

LASER MODULES Micro Line, large fan angle

SERIES 5LP Gaussian intensity distribution



This is a printout of the page https://sukhamburg.com/products/details/5LM8-S325_55CM-520-54-O11-A7_5-P-6 from 4/26/2024

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]