

## 5LM8-S325+55CM-520-54-O11-A7.5-PS-7

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  $\mu\text{m}$
- Wavelength: 520 nm
- Working distance: 313 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 5LM8-S325+55CM-520-54-O11-A7.5-PS-7 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 [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

5LM8-S325+55CM-520-54-O11-A7.5-PS-7

Series	5LM	
Order Code	5LM8-S325+55CM-520-54-O11-A7.5-PS-7	
Line profile	Gaussian Intensity Distribution	
Line type	Laser Micro Line	
Wavelength	520 +10/-5 nm	
Laser output power	54 mW	
Laser safety class	3B	
Fan angle $\alpha$	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 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 5LMM	<ul style="list-style-type: none"><li>▪ Macro Line, <b>small</b> fan angle</li><li>▪ Gaussian intensity distribution</li><li>▪ Extended depth of focus</li></ul>
LASER MODULES SERIES LNC-5LM	<ul style="list-style-type: none"><li>▪ Micro Line, <b>small</b> fan angle</li><li>▪ Gaussian intensity distribution</li><li>▪ Low noise</li></ul>
LASER MODULES SERIES 13LR	<ul style="list-style-type: none"><li>▪ Micro Line Generator, fan angle</li><li>▪ Uniform intensity distribution</li></ul>
LASER MODULES SERIES 13LN	<ul style="list-style-type: none"><li>▪ Micro Line, <b>small</b> fan angle</li><li>▪ Uniform intensity distribution</li><li>▪ Thin lines</li></ul>
LASER MODULES SERIES 5LP+25CM	<ul style="list-style-type: none"><li>▪ <b>Compact</b> Micro Line, <b>large</b> fan angle</li><li>▪ Gaussian intensity distribution</li></ul>
LASER MODULES SERIES 5LM+25CM	<ul style="list-style-type: none"><li>▪ <b>Compact</b> Micro Line, <b>small</b> fan angle</li><li>▪ Gaussian intensity distribution</li></ul>
LASER MODULES SERIES 5LP	<ul style="list-style-type: none"><li>▪ Micro Line, <b>large</b> fan angle</li><li>▪ Gaussian intensity distribution</li></ul>

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