### 5LM15-S50+55CM-520-56-O11-A7.5-P-6

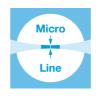
Micro Line Generator with a fan angle



#### FEATURES

Laser line with a fan angle and Gaussian intensity distribution.

- Line length: 11.9 mm
- Line width: 24 µm
- Wavelength: 520 nm
- Working distance: 42 mm
- Micro Line Generator for small laser line widths and high power density in the focal plane



# DESCRIPTION

The laser diode beam source type 5LM15-S50+55CM-520-56-O11-A7.5-P-6 has a fan angle of 15°.

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 <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**

5LM15-S50+55CM-520-56-O11-A7.5-P-6

Series		5LM
Order Code	5LM15-S50+55CM-520-56-O11-A7.5-P-6	
Line profile	Gaussian Intensity Distribution	
Line type	Laser Micro Line	
Wavelength	520 +10/-5 nm	
Laser output power	56 mW	
aser safety class 3E		
Fan angle α	a 15 deg	
ocussing range 30-65 mm		
Working distance		42 mm
Line length	11.9 mm	
Line width	0.024 mm	
Rayleigh range	1.75 mm	
Edge intensity	18 %	
Diameter laser module	25/28 mm	
Module length	77.3 mm	
Installation length	149.3 mm	
Cable length	able 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
13MK-25-36-10-M	Mounting Console with base plate with dovetail profile
PS051003E	Power Supply 5 V

### **RELATED PRODUCTS**

LASER MODULES SERIES 5LMM	<ul> <li>Macro Line, small fan angle</li> <li>Gaussian intensity distribution</li> <li>Extended depth of focus</li> </ul>
LASER MODULES SERIES LNC-5LM	<ul> <li>Micro Line, small fan angle</li> <li>Gaussian intensity distribution</li> <li>Low noise</li> </ul>
LASER MODULES SERIES 13LR	<ul><li>Micro Line Generator, fan angle</li><li>Uniform intensity distribution</li></ul>
LASER MODULES SERIES 13LN	<ul> <li>Micro Line, small fan angle</li> <li>Uniform intensity distribution</li> <li>Thin lines</li> </ul>
LASER MODULES SERIES 5LP+25CM	<ul> <li>Compact Micro Line, large fan angle</li> <li>Gaussian intensity distribution</li> </ul>
LASER MODULES SERIES 5LM+25CM	<ul> <li>Compact Micro Line, small fan angle</li> <li>Gaussian intensity distribution</li> </ul>
LASER MODULES SERIES 5LP	<ul> <li>Micro Line, large fan angle</li> <li>Gaussian intensity distribution</li> </ul>



## **DATA SHEET**

This is a printout of the page <u>https://sukhamburg.com/products/details/5LM15-S50\_55CM-520-56-O11-A7\_5-P-6</u> from 5/3/2024

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