#### 5LM15-S88+55CM-639-18-H18-A8-C-6

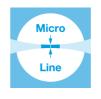
Micro Line Generator with a fan angle



#### FEATURES

Laser line with a fan angle and Gaussian intensity distribution.

- Line length: 21.9 mm
- Line width: 38 μm
- Wavelength: 639 nm
- Working distance: 78 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-S88+55CM-639-18-H18-A8-C-6 has a fan angle of  $15^{\circ}$ .

The intensity profile is Gaussian in line direction clipped by an aperture with an edge intensity of 38 %. 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 C</u> 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-S88+55CM-639-18-H18-A8-C-6

Series		5LM
Order Code	5LM15-S88+55CM-639-18-H18-A8-C-6	
Line profile	Gaussian Intensity Distribution	
Line type	Laser Micro Line	
Wavelength	639 +10/-10 nm	
Laser output power	18 mW	
Laser safety class	3В	
Fan angle α	15 deg	
Focussing range	sing range 65-120 mm	
Working distance 78 mm		
Line length	21.9 mm	
Line width	0.038 mm	
Rayleigh range	3.52 mm	
Edge intensity	38 %	
Diameter laser module	25/28 mm	
Module length	77.3 mm	
Installation length	185.3 mm	
Cable length 1.5 m		1.5 m
Connector type	Lumberg SV50 IEC 61076-2-106	
Supply voltage	5 ± 0.2 V	
Max. current consumption	0.25 A	
Working temperature	0 - 40 °C	
Modulation inputs	Analog	TTL
Input resistance	22 kOhm	22 kOhm
Max. modulation frequency	100 kHz	100 kHz
Modulation delay ON/OFF	1/0.5 µs	2/1 μs
Rise / Fall time	3/2 µs	3/2 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-S88\_55CM-639-18-H18-A8-C-6</u> from 5/2/2024

## 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

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