

## 5LM15-S50+25CM-785-90-Q06-A8-S-6

Compact Micro Line Generator with a fan angle



### FEATURES

Compact laser line with a fan angle and Gaussian intensity distribution.

- Line length: 11.9 mm
- Line width: 23  $\mu\text{m}$
- Wavelength: 785 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+25CM-785-90-Q06-A8-S-6 has a fan angle of 15°.

The intensity profile is Gaussian in line direction clipped by an aperture with an edge intensity of 3 %. The line width is constant along the laser line. Across the laser line the intensity distribution is Gaussian.

The laser has integrated electronics [type S](#) for control of the laser output power. 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

5LM15-S50+25CM-785-90-Q06-A8-S-6

Series	5LM	
Order Code	5LM15-S50+25CM-785-90-Q06-A8-S-6	
Line profile	Gaussian Intensity Distribution	
Line type	Laser Micro Line	
Wavelength	785 +10/-10 nm	
Laser output power	90 mW	
Laser safety class	3B	
Fan angle $\alpha$	15 deg	
Focussing range	30-65 mm	
Working distance	42 mm	
Line length	11.9 mm	
Line width	0.023 mm	
Rayleigh range	1.1 mm	
Edge intensity	3 %	
Diameter laser module	12 mm	
Module length	64.9 mm	
Installation length	136.9 mm	
Cable length	1.5 m	
Connector type	Lumberg SV50 IEC 61076-2-106	
Supply voltage	5 $\pm$ 0.25 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	50 kHz	1000 kHz
Modulation delay ON/OFF	4/0.5 $\mu$ s	0.05/0.05 $\mu$ s
Rise / Fall time	5/4 $\mu$ s	0.1/0.02 $\mu$ s

## DOWNLOADS

[921120000624.pdf](#)

## ACCESSORIES

60EX-4	Eccentric key with a stroke of $\pm 0.5$ mm.
60EX-4-L	Alternative eccentric key with long handle with a stroke of $\pm 0.5$ mm.
9D-12	Screwdriver WS 1.2
PS051003E	Power Supply 5 V

## RELATED PRODUCTS

LASER MODULES SERIES 5LMM+25CM	<ul style="list-style-type: none"><li>▪ <b>Compact</b> Micro 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	<ul style="list-style-type: none"><li>▪ 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>

This is a printout of the page [https://sukhamburg.com/products/details/5LM15-S50\\_25CM-785-90-Q06-A8-S-6](https://sukhamburg.com/products/details/5LM15-S50_25CM-785-90-Q06-A8-S-6) from 4/25/2024

## 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](mailto:info@sukhamburg.de)

[www.sukhamburg.com](http://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. [\[more\]](#)