

## 5LM8-S000+25CM-785-86-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: 140 mm
- Line width: 470  $\mu\text{m}$
- Wavelength: 785 nm
- Working distance: 1000 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-S000+25CM-785-86-Q06-A8-S-6 has a fan angle of 8°.

The intensity profile is Gaussian in line direction clipped by an aperture with an edge intensity of 5 %. 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

5LM8-S000+25CM-785-86-Q06-A8-S-6

Series	5LM	
Order Code	5LM8-S000+25CM-785-86-Q06-A8-S-6	
Line profile	Gaussian Intensity Distribution	
Line type	Laser Micro Line	
Wavelength	785 +10/-10 nm	
Laser output power	86 mW	
Laser safety class	3B	
Fan angle $\alpha$	8 deg	
Focussing range	425-inf mm	
Working distance	1000 mm	
Line length	140 mm	
Line width	0.47 mm	
Rayleigh range	441 mm	
Edge intensity	5 %	
Diameter laser module	12 mm	
Module length	60.7 mm	
Installation length	1090.7 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



[921120000625.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>

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## 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)**

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