

5LM8-S88+55CM-685-36-H13-A8-CS-7

Micro Line Generator with a fan angle



FEATURES

Laser line with a fan angle and Gaussian intensity distribution.

Line length: 12 mm
Line width: 34 μm
Wavelength: 685 nm
Working distance: 78 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-S88+55CM-685-36-H13-A8-CS-7 has a fan angle of 8°.

The intensity profile is Gaussian in line direction clipped by an aperture with an edge intensity of 19 %. 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 CS</u> for control of the laser output power and serial interface (RS232). 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

5LM8-S88+55CM-685-36-H13-A8-CS-7

Order Code 5LM8-S88+55CM-685-36-H13-A8-CS-7 Line profile Gaussian Intensity Distribution Line type Laser Micro Line Wavelength 685 ± 10/-10 nm Laser output power 36 mW Laser safety class 38 Fan angle α 8 deg Focussing range 65-120 mm Working distance 78 mm Line length 12 mm Line width 0.034 mm Rayleigh range 2.68 mm Edge intensity 19 % Diameter laser module 25/28 mm Module length 77.3 mm Installation length 185.3 mm Cable length 1.5 m Connector type Lumberg SV70 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 9 kOhm 9 kOhm Max. modulation frequency 0.001 kHz 250 kHz Modulation delay ON/OFF </th <th colspan="3">Series 5LM</th>	Series 5LM		
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Diameter laser module 25/28 mm Module length 77.3 mm Installation length 185.3 mm Cable length 1.5 m Connector type Lumberg SV70 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 9 kOhm 9 kOhm Max. modulation frequency 0.001 kHz 250 kHz Modulation delay ON/OFF 3000/3000 μs 0.5/0.2 μs Rise / Fall time 200000/200000 μs 0.8/0.4 μs	Rayleigh range	2.68 mm	
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$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Cable length	1.5 m	
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Modulation inputs Analog TTL Input resistance 9 kOhm 9 kOhm Max. modulation frequency 0.001 kHz 250 kHz Modulation delay ON/OFF 3000/3000 μs 0.5/0.2 μs Rise / Fall time 200000/200000 μs 0.8/0.4 μs	Max. current consumption	0.25 A	
Input resistance 9 kOhm 9 kOhm Max. modulation frequency 0.001 kHz 250 kHz Modulation delay ON/OFF 3000/3000 μs 0.5/0.2 μs Rise / Fall time 200000/200000 μs 0.8/0.4 μs	Working temperature	0 - 40 °C	
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Modulation delay ON/OFF 3000/3000 μs 0.5/0.2 μs Rise / Fall time 200000/200000 μs 0.8/0.4 μs	Input resistance	9 kOhm	9 kOhm
Rise / Fall time 200000/200000 μs 0.8/0.4 μs	Max. modulation frequency	0.001 kHz	250 kHz
<u> </u>	Modulation delay ON/OFF	3000/3000 µs	0.5/0.2 μs
Interface RS232	Rise / Fall time	200000/200000 μs	0.8/0.4 μs
	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

Mounting Console with base plate with dovetail 13MK-25-36-10-M

profile

Power Supply 5 V for laser modules with RS232 PS051007E

interface

RELATED PRODUCTS

LASER MODULES Macro Line, small fan angle **SERIES 5LMM** Gaussian intensity distribution

Extended depth of focus

LASER MODULES Micro Line, small fan angle SERIES LNC-5LM

Gaussian intensity distribution

Low noise

LASER MODULES Micro Line Generator, fan angle **SERIES 13LR** Uniform intensity distribution

LASER MODULES Micro Line, small fan angle **SERIES 13LN** Uniform intensity distribution

Thin lines

■ Compact Micro Line, large fan angle LASER MODULES

 Gaussian intensity distribution **SERIES 5LP+25CM**

LASER MODULES Compact Micro Line, small fan angle

SERIES 5LM+25CM Gaussian intensity distribution

LASER MODULES Micro Line, large fan angle

SERIES 5LP Gaussian intensity distribution



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