

### 5LM15-S000+55CM-685-39-H13-A8-C-6

Micro Line Generator with a fan angle



#### **FEATURES**

Laser line with a fan angle and Gaussian intensity distribution.

Line length: 266 mm
Line width: 388 μm
Wavelength: 685 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 5LM15-S000+55CM-685-39-H13-A8-C-6 has a fan angle of 15°.

The intensity profile is Gaussian in line direction clipped by an aperture with an edge intensity of 14 %. The line width is constant along the laser line. Across the laser line the intensity distribution is Gaussian.

The laser has integrated electronics  $\underline{type\ C}$  for control of the laser output power. The output power can be controlled using the  $\underline{modulation\ input\ ports\ (TTL\ and\ analog)}$  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-S000+55CM-685-39-H13-A8-C-6

Series 5LM			
Order Code	5LM15-S000+55CM-685-39-H13-A8-C-6		
Line profile	Gaussian Intensity Distribution		
Line type	Laser Micro Line		
Wavelength	685 +10/-10 nm		
Laser output power	39 mW		
Laser safety class	3В		
Fan angle α	15 deg		
Focussing range	425-inf mm		
Working distance	1000 mm		
Line length	266 mm		
Line width	0.388 mm		
Rayleigh range	346 mm		
Edge intensity	14 %		
Diameter laser module	25/28 mm		
Module length	73.1 mm		
Installation length	1103.1 mm		
Cable length	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

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

profile

PS051003E Power Supply 5 V

# **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

**LASER MODULES** ■ Compact Micro Line, large fan angle

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

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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