

## 5LP60-S50+55CM-685-37-H13-A8-C-6

Micro Line Generator with a large fan angle



#### **FEATURES**

Laser line with a large fan angle and Gaussian intensity distribution.

Line length: 48 mm
Line width: 19 μm
Wavelength: 685 nm
Working distance: 46 mm

 Micro Line Generator for small laser line widths and high power density in the focal plane



### DESCRIPTION

The laser diode beam source type 5LP60-S50+55CM-685-37-H13-A8-C-6 has a fan angle of  $62^{\circ}$ .

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**

5LP60-S50+55CM-685-37-H13-A8-C-6

Modulation delay ON/OFF 1/0.5 μs 2/1 μs	Series		5LP	
Line type       Laser Micro Line         Wavelength       685 +10/-10 nm         Laser output power       37 mW         Laser safety class       3B         Fan angle α       62 deg         Focussing range       35-70 mm         Working distance       46 mm         Line length       48 mm         Line width       0.019 mm         Rayleigh range       0.865 mm         Edge intensity       14 %         Diameter laser module       25/28 mm         Module length       86.1 mm         Installation length       162.1 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	Order Code	5LP60-S50+55CM-685-37-H13-A8-C-6		
Wavelength         685 +10/-10 nm           Laser output power         37 mW           Laser safety class         3B           Fan angle α         62 deg           Focussing range         35-70 mm           Working distance         46 mm           Line length         48 mm           Line width         0.019 mm           Rayleigh range         0.865 mm           Edge intensity         14 %           Diameter laser module         25/28 mm           Module length         86.1 mm           Installation length         162.1 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	Line profile	Gaussian Intensity Distribution		
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Line width $0.019  \mathrm{mm}$ Rayleigh range $0.865  \mathrm{mm}$ Edge intensity $14  \%$ Diameter laser module $25/28  \mathrm{mm}$ Module length $86.1  \mathrm{mm}$ Installation length $162.1  \mathrm{mm}$ Cable length $1.5  \mathrm{m}$ Connector typeLumberg SV50 IEC 61076-2-106Supply voltage $5 \pm 0.2  \mathrm{V}$ Max. current consumption $0.25  \mathrm{A}$ Working temperature $0 - 40  ^{\circ}\mathrm{C}$ Modulation inputsAnalogTTLInput resistance $22  \mathrm{kOhm}$ $22  \mathrm{kOhm}$ Max. modulation frequency $100  \mathrm{kHz}$ $100  \mathrm{kHz}$ Modulation delay ON/OFF $1/0.5  \mu \mathrm{s}$ $2/1  \mu \mathrm{s}$	Working distance	46 mm		
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Max. modulation frequency100 kHz100 kHzModulation delay ON/OFF1/0.5 μs2/1 μs	Modulation inputs	Analog	TTL	
Modulation delay ON/OFF 1/0.5 μs 2/1 μs	Input resistance	22 kOhm	22 kOhm	
	Max. modulation frequency	100 kHz	100 kHz	
Rise / Fall time $3/2 \mu s$ $3/2 \mu s$	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



Screwdriver WS 1.2 9D-12

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, large fan angle **SERIES 5LPM** Gaussian intensity distribution

Extended depth of focus

LASER MODULES • Micro Line, large fan angle **SERIES LNC-5LP** 

Gaussian intensity distribution

Low noise

LASER MODULES ■ Micro Line Generator, fan angle **SERIES 13LR** 

Uniform intensity distribution

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

Uniform intensity distribution

Thin lines

LASER MODULES Compact Micro Line, small fan angle

SERIES 5LM+25CM Gaussian intensity distribution

LASER MODULES Compact Micro Line, large fan angle

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

LASER MODULES ■ Micro Line, small fan angle

**SERIES 5LM** Gaussian intensity distribution



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