

5LP60-S000+55CM-639-17-H18-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: 1200 mm
Line width: 430 μm
Wavelength: 639 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 5LP60-S000+55CM-639-17-H18-A8-C-6 has a fan angle of 62°.

The intensity profile is Gaussian in line direction clipped by an aperture with an edge intensity of 38 %. 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-S000+55CM-639-17-H18-A8-C-6

Max. modulation frequency100 kHz100 kHzModulation delay ON/OFF1/0.5 μs2/1 μs	Series		5LP	
Line type Laser Micro Line Wavelength 639 +10/-10 nm Laser output power 17 mW Laser safety class 3B Fan angle α 62 deg Focussing range 430-inf mm Working distance 1000 mm Line length 1200 mm Line width 0.43 mm Rayleigh range 454 mm Edge intensity 38 % Diameter laser module 25/28 mm Module length 86.1 mm Installation length 1116.1 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-S000+55CM-639-17-H18-A8-C-6		
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Rayleigh range $454 \mathrm{mm}$ Edge intensity 38% Diameter laser module $25/28 \mathrm{mm}$ Module length $86.1 \mathrm{mm}$ Installation length $1116.1 \mathrm{mm}$ 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 $1/0.5 \mu \mathrm{s}$ $2/1 \mu \mathrm{s}$	Line length	1200 mm		
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$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Rayleigh range	454 mm		
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Modulation inputsAnalogTTLInput resistance22 kOhm22 kOhmMax. modulation frequency100 kHz100 kHzModulation delay ON/OFF1/0.5 μs2/1 μs	Max. current consumption	0.25 A		
Input resistance22 kOhmMax. modulation frequency100 kHzModulation delay ON/OFF1/0.5 μs	Working temperature		0 - 40 °C	
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	
<u></u>	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

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

profile

PS051003E Power Supply 5 V

RELATED PRODUCTS

LASER MODULES

• Macro Line, large fan angle

• Gaussian intensity distribution

Gaussian intensity distributionExtended 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

• Uniform intensity distribution

LASER MODULES

• Micro Line, small fan angle

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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