

5LP80-S325+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: 565 mm
Line width: 140 μm
Wavelength: 639 nm
Working distance: 317 mm

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



DESCRIPTION

The laser diode beam source type 5LP80-S325+55CM-639-17-H18-A8-C-6 has a fan angle of 84°.

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

5LP80-S325+55CM-639-17-H18-A8-C-6

Modulation delay ON/OFF 1/0.5 μs 2/1 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 84 deg Focussing range 260-430 mm Working distance 317 mm Line length 565 mm Line width 0.14 mm Rayleigh range 48 mm Edge intensity 38 % Diameter laser module 25/28 mm Module length 86.1 mm Installation length 433.1 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	5LP80-S325+55CM-639-17-H18-A8-C-6	
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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 $1/0.5 \mu \mathrm{s}$ $2/1 \mu \mathrm{s}$	Module length	86.1 mm	
	Installation length	433.1 mm	
Supply voltage $5 \pm 0.2 \text{V}$ Max. current consumption 0.25A Working temperature $0 - 40 ^{\circ}\text{C}$ Modulation inputsAnalogTTLInput resistance 22kOhm 22kOhm Max. modulation frequency 100kHz 100kHz Modulation delay ON/OFF $1/0.5 \mu \text{s}$ $2/1 \mu \text{s}$	Cable length	1.5 m	
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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 kOhm22 kOhmMax. modulation frequency100 kHz100 kHzModulation delay ON/OFF1/0.5 μs2/1 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 μs 3/2 μs	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



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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