5LM8-S150+55CM-639-17-H18-A8-C-6

Micro Line Generator with a fan angle

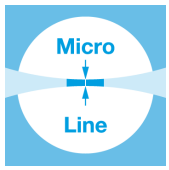


FEATURES

Laser line with a fan angle and Gaussian intensity distribution.

- Line length: 21.8 mm
- Line width: 64 µm
- Wavelength: 639 nm
- Working distance: 143 mm

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



DESCRIPTION

The laser diode beam source type 5LM8-S150+55CM-639-17-H18-A8-C-6 has a fan angle of 8°.

The intensity profile is Gaussian in line direction clipped by an aperture with an edge intensity of 44 %. The line width is constant along the laser line. Across the laser line the intensity distribution is Gaussian.

The laser has integrated electronics type C for control of the laser output power. The output power can be controlled using the 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

5LM8-S150+55CM-639-17-H18-A8-C-6

Series		5LM
Order Code		5LM8-S150+55CM-639-17-H18-A8-C-6
Line profile		Gaussian Intensity Distribution
Line type		Laser Micro Line
Wavelength		639 +10/-10 nm
Laser output power		17 mW
Laser safety class		3B
Fan angle α		8 deg
Focussing range		120-255 mm
Working distance		143 mm
Line length		21.8 mm
Line width		0.064 mm
Rayleigh range		10.2 mm
Edge intensity		44 %
Diameter laser module		25/28 mm
Module length		77.3 mm
Installation length		250.3 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
13MK-25-36-10-M	Mounting Console with base plate with dovetail profile
PS051003E	Power Supply 5 V

RELATED PRODUCTS

LASER MODULES SERIES 5LMM	▪ Macro Line, **small** fan angle ▪ Gaussian intensity distribution ▪ Extended depth of focus
LASER MODULES SERIES LNC-5LM	▪ Micro Line, **small** fan angle ▪ Gaussian intensity distribution ▪ Low noise
LASER MODULES SERIES 13LR	▪ Micro Line Generator, fan angle ▪ Uniform intensity distribution
LASER MODULES SERIES 13LN	▪ Micro Line, **small** fan angle ▪ Uniform intensity distribution ▪ Thin lines
LASER MODULES SERIES 5LP+25CM	▪ **Compact** Micro Line, **large** fan angle ▪ Gaussian intensity distribution
LASER MODULES SERIES 5LM+25CM	▪ **Compact** Micro Line, **small** fan angle ▪ Gaussian intensity distribution
LASER MODULES SERIES 5LP	▪ Micro Line, **large** fan angle ▪ Gaussian intensity distribution

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