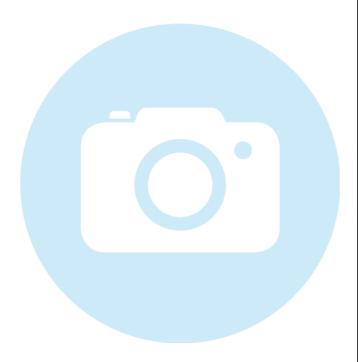


5LMM8-S150-1+55CM-635-7-H10-A8-C-6

Macro Line Generator with a fan angle



FEATURES

Laser line with a fan angle, Gaussian intensity distribution and extended depth of focus.

Line length: 21.8 mm
Line width: 139 µm
Wavelength: 635 nm
Working distance: 138 mm
Depth of focus: 63.7 mm

Macro Line Generator for extended depth of focus



DESCRIPTION

The laser diode beam source type 5LMM8-S150-1+55CM-635-7-H10-A8-C-6 has a fan angle of 8° and an extended depth of focus.

The intensity profile is Gaussian in line direction clipped by an aperture with an edge intensity of 31 %. The line width is constant along the laser line. Across the laser line the intensity distribution is approx. Gaussian.

The laser has integrated electronics <u>type C</u> for control of the laser output power. The output power can be controlled using the <u>modulation input ports (TTL and analog)</u> 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

5LMM8-S150-1+55CM-635-7-H10-A8-C-6

Order Code 5LMM8-S150-1+55CM-635-7-H10-A8-C-6 Line profile Gaussian Intensity Distribution Line type Laser Macro Line Wavelength 635 +10/-10 nm Laser output power 7 mW Laser safety class 3B Fan angle α 8 deg Focussing range 115-250 mm Working distance 138 mm Line length 21.8 mm Line width 0.139 mm Depth of focus 63.7 mm Edge intensity 31 % Diameter laser module 25/28 mm Module length 78.5 mm Installation length 246.5 mm Cable length 1.5 m Cable length 1.5 m Connector type Lumberg SV50 IEC 61076-2-106 Supply voltage 5 ± 0.2 V Max. current consumption 0.25A Working temperature 0 - 40 °C Modulation inputs Analog TTL Input resistance 22 kOhm 22 kOhm Max. modulation frequency 100 kHz	Series 5LMM			
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Fan angle α8 degFocussing range115-250 mmWorking distance138 mmLine length21.8 mmLine width0.139 mmDepth of focus63.7 mmEdge intensity31 %Diameter laser module25/28 mmModule length78.5 mmInstallation length246.5 mmCable length1.5 mConnector typeLumberg SV50 IEC 61076-2-106Supply voltage $5 \pm 0.2 \text{ V}$ Max. current consumption0.25 AWorking temperature $0 - 40 ^{\circ}\text{C}$ Modulation inputsAnalogTTLInput resistance22 kOhm22 kOhmMax. modulation frequency100 kHz100 kHzModulation delay ON/OFF1/0.5 μs2/1 μs	Laser output power	7 mW		
Focussing range 115-250 mm Working distance 138 mm Line length 21.8 mm Line width 0.139 mm Depth of focus 63.7 mm Edge intensity 31 % Diameter laser module 25/28 mm Module length 78.5 mm Installation length 246.5 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	Laser safety class	3B		
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Depth of focus63.7 mmEdge intensity31 %Diameter laser module25/28 mmModule length78.5 mmInstallation length246.5 mmCable length1.5 mConnector typeLumberg SV50 IEC 61076-2-106Supply voltage5 ± 0.2 VMax. current consumption0.25 AWorking temperature0 - 40 °CModulation inputsAnalogTTLInput resistance22 kOhm22 kOhmMax. modulation frequency100 kHz100 kHzModulation delay ON/OFF1/0.5 μs2/1 μs	Line length		21.8 mm	
Edge intensity 31% Diameter laser module $25/28 \text{mm}$ Module length 78.5mm Installation length 246.5mm Cable length 1.5m Connector typeLumberg SV50 IEC $61076-2-106$ 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 $1/0.5 \mu \text{s}$ $2/1 \mu \text{s}$	Line width	0.139 mm		
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Depth of focus	63.7 mm		
Module length $78.5 \mathrm{mm}$ Installation length $246.5 \mathrm{mm}$ 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 $1/0.5 \mu \mathrm{s}$ $2/1 \mu \mathrm{s}$	Edge intensity	31 %		
Installation length246.5 mmCable length1.5 mConnector typeLumberg SV50 IEC 61076-2-106Supply voltage5 ± 0.2 VMax. current consumption0.25 AWorking temperature0 - 40 °CModulation inputsAnalogTTLInput resistance22 kOhm22 kOhmMax. modulation frequency100 kHz100 kHzModulation delay ON/OFF1/0.5 μs2/1 μs	Diameter laser module		25/28 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 $1/0.5 \mu \mathrm{s}$ $2/1 \mu \mathrm{s}$	Module length	78.5 mm		
Connector typeLumberg SV50 IEC 61076-2-106Supply 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 $1/0.5 \mu \text{S}$ $2/1 \mu \text{S}$	Installation length	246.5 mm		
	Cable length	1.5 m		
Max. current consumption0.25 AWorking temperature0 - 40 °CModulation inputsAnalogTTLInput resistance22 kOhm22 kOhmMax. modulation frequency100 kHz100 kHzModulation delay ON/OFF1/0.5 μs2/1 μs	Connector type	Lumberg SV50 II	Lumberg SV50 IEC 61076-2-106	
Working temperature0 - 40 °CModulation inputsAnalogTTLInput resistance22 kOhm22 kOhmMax. modulation frequency100 kHz100 kHzModulation delay ON/OFF1/0.5 μs2/1 μs	Supply voltage		5 ± 0.2 V	
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 $3/2 \mu s$ $3/2 \mu s$	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

SERIES 5LM

Micro Line, small fan angle

Gaussian intensity distribution

LASER MODULES

SERIES LNC-5LMM

Macro Line, small fan angle

Gaussian intensity distribution

Extended depth of focus

Low Noise

LASER MODULES

SERIES 13LRM

Macro Line Generator, fan angle

Uniform intensity distribution

Extended depth of focus

LASER MODULES **SERIES 13LNM**

Micro Line Generator, small fan angle

Uniform intensity distribution

Extended depth of focus

LASER MODULES **SERIES 5LPM+25CM** Compact Macro Line, large fan angle

Gaussian intensity distribution

Extended depth of focus

LASER MODULES SERIES 5LMM+25CM Compact Micro Line, small fan angle

Gaussian intensity distribution

Extended depth of focus

LASER MODULES **SERIES 5LPM**

Macro Line, large fan angle

Gaussian intensity distribution

Extended depth of focus



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