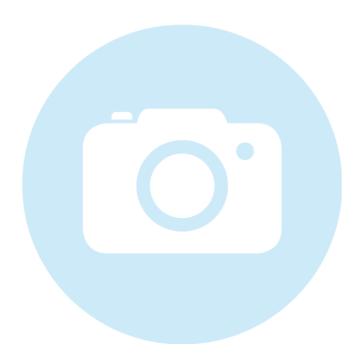


# 5LMM15-S150-1+55CM-445-61-G02-A7.5-PS-7

Macro Line Generator with a fan angle



#### **FEATURES**

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

Line length: 39.7 mm
Line width: 99 μm
Wavelength: 445 nm
Working distance: 138 mm
Depth of focus: 44.6 mm

- Macro Line Generator for extended depth of focus
- With RS232 interface





# **DESCRIPTION**

The laser diode beam source type 5LMM15-S150-1+55CM-445-61-G02-A7.5-PS-7 has a fan angle of 15° and an extended depth of focus.

The intensity profile is Gaussian in line direction clipped by an aperture with an edge intensity of 2 %. 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 PS</u> with micro-controller for control of the laser output power and serial interface (RS232). 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**

5LMM15-S150-1+55CM-445-61-G02-A7.5-PS-7

Series 5LMM		
Order Code	5LMM15-S150-1+55CM-445-61-G02-A7.5-PS-7	
Line profile	Gaussian Intensity Distribution	
Line type	Laser Macro Line	
Wavelength	445 +15/-5 nm	
Laser output power	61 mW	
Laser safety class	3В	
Fan angle α	15 deg	
Focussing range	115-250 mm	
Working distance	138 mm	
Line length	39.7 mm	
Line width	0.099 mm	
Depth of focus	44.6 mm	
Edge intensity	2%	
Diameter laser module	25/28 mm	
Module length	78.5 mm	
Installation length	246.5 mm	
Cable length	1.5 m	
Connector type	Lumberg SV70 IEC 61076-2-106	
Supply voltage	5 ± 0.2 V	
Max. current consumption	0.5 A	
Working temperature	15 - 40 °C	
Modulation inputs	Analog	TTL
Input resistance	9 kOhm	9 kOhm
Max. modulation frequency	0.001 kHz	250 kHz
Modulation delay ON/OFF	3000/3000 μs	0.6/0.2 μs
Rise / Fall time	200000/200000 μs	0.2/0.2 μs



Interface RS232

## **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

**PS051007E** Power Supply 5 V for laser modules with RS232

interface

#### 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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