

# 13LNM250-S1000-7+90CM-639-6-H18-M60-C-6

Macro Line Generator with a fan angle



#### **FEATURES**

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

Line length: 56 mm
Line width: 132 µm
Wavelength: 639 nm
Working distance: 965.4 mm
Depth of focus: 58.1 mm

Macro Line Generator for extended depth of focus



#### **DESCRIPTION**

The laser diode beam source type 13LNM250-S1000-7+90CM-639-6-H18-M60-C-6 has a fan angle of 2.5°, approx. uniform intensity distribution along the laser line and extended depth of focus.

More precisely, it is Gaussian clipped by an aperture with an edge intensity of 87 %. Across the laser line the intensity distribution is 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.

For this laser type the working distance is fixed. A fine-adjustment of the distance between laser and target is recommended for fine-focusing in order to achieve minimal line width.



# **TECHNICAL DATA**

13LNM250-S1000-7+90CM-639-6-H18-M60-C-6

Max. modulation frequency100 kHz100 kHzModulation delay ON/OFF1/0.5 μs2/1 μs	Series	13LNM250	
Line type         Laser Macro Line           Wavelength         639 +10/-10 nm           Laser output power         6 mW           Laser safety class         3B           Fan angle α         2.5 deg           Focussing range         965.4-965.4 mm           Working distance         965.4 mm           Line length         56 mm           Line width         0.132 mm           Depth of focus         58.1 mm           Edge intensity         87 %           Diameter laser module         25/28 mm           Module length         134.4 mm           Installation length         1129.8 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	13LNM250-S1000-7+90CM-639-6-H18-M60-C-6	
Wavelength         639 +10/-10 nm           Laser output power         6 mW           Laser safety class         3B           Fan angle α         2.5 deg           Focussing range         965.4-965.4 mm           Working distance         965.4 mm           Line length         56 mm           Line width         0.132 mm           Depth of focus         58.1 mm           Edge intensity         87 %           Diameter laser module         25/28 mm           Module length         134.4 mm           Installation length         1129.8 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 delay ON/OFF         1/0.5 μs         2/1 μs	Line profile	Constant Intensity Distribution	
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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



## **DOWNLOADS**



# **ACCESSORIES**

**9D-12** Screwdriver WS 1.2

**PS051003E** Power Supply 5 V

#### **RELATED PRODUCTS**

LASER MODULES SERIES 13LN

- Micro Line, small fan angle
- Uniform intensity distribution
- Thin lines

LASER MODULES SERIES LNC-13LNM

- Macro Line Generator, small fan angle
- Uniform intensity distribution
- Extended depth of focus
- Low noise

LASER MODULES SERIES 13LRM

- Macro Line Generator, fan angleUniform 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+25CM

- Compact Macro Line, large fan angle
- Gaussian intensity distribution
- Extended depth of focus

LASER MODULES SERIES 5LMM

- Macro 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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