

13M-S250+55CM-445-76-G02-T15-PS-7

Laser Micro Focus Generator with elliptical Gaussian beam profile



FEATURES

Laser spot with elliptical Gaussian beam profile.

- Spot diameter: 0.021 x 0.046 mm
- Wavelength: 445 nm
- Working distance: 245 mm

- Micro Focus Generator for small spot widths and high power density in the focal plane
- With RS232 interface



DESCRIPTION

The laser diode beam source type 13M-S250+55CM-445-76-G02-T15-PS-7 produces an elliptical laser spot with elliptical Gaussian intensity distribution.

The laser has integrated electronics [type PS](#) with micro-controller for control of the laser output power and serial interface (RS232). 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 the spot diameter increases proportionally to the working distance. A fine-adjustment of the distance between laser and target is recommended for fine-focusing.

TECHNICAL DATA

13M-S250+55CM-445-76-G02-T15-PS-7

Series

13M

Order Code	13M-S250+55CM-445-76-G02-T15-PS-7	
Line profile	Gaussian Intensity Distribution	
Wavelength	445 +15/-5 nm	
Laser output power	76 mW	
Laser safety class	3B	
Focussing range	205-410 mm	
Working distance	245 mm	
Spot height	0.046 mm	
Spot width	0.021 mm	
Rayleigh range	1.62 mm	
Diameter laser module	25/28 mm	
Module length	75.9 mm	
Installation length	350.9 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 13MM

- Macro Focus Generator
- **Circular** beam profile
- Extended depth of focus

LASER MODULES SERIES 13MC

- Micro Focus Generator
- **Rotationally symmetric**, Gaussian beam profile

LASER MODULES SERIES LNC-13M

- Micro Focus Generator
- Elliptical Gaussian beam profile
- Low noise

LASER MODULES SERIES 5MC

- **Compact** Laser Micro Focus Generator
- **Rotationally symmetric**, Gaussian beam profile

LASER MODULES SERIES 5M

- **Compact** Laser Micro Focus Generator
- Elliptical Gaussian beam profile

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