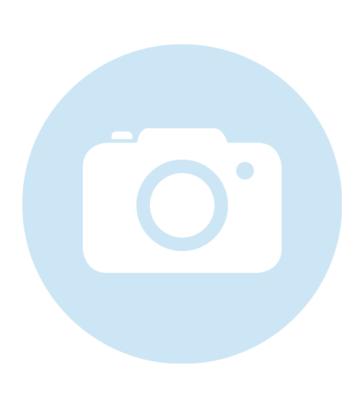
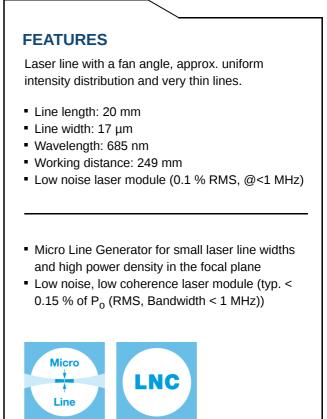
LNC-13LN165-S250+91CR-685-9-H13-M60-H-6

Low Noise Micro Line Generator with a fan angle





DESCRIPTION

The laser diode beam source type LNC-13LN165-S250+91CR-685-9-H13-M60-H-6 has a fan angle of 1.7° and approx. uniform intensity distribution along the laser line.

More precisely, it is Gaussian clipped by an aperture with an edge intensity of 75 %. Across the laser line the intensity distribution is Gaussian. The line width is constant along 60 % of the central are, outside this area the line width differs up to 30 %.

The laser has integrated electronics <u>type H</u> for control of the laser output power. It is a low noise laser source (0.1 % RMS,@<1 MHz) with reduced coherence length and operates mode-hopping free. Due to the reduced coherence length the speckle contrast might be lowered. Please note that this effect is smaller for smaller lines and spots. 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

LNC-13LN165-S250+91CR-685-9-H13-M60-H-6

| Series 13LN165 | | |
|-------------------------------|---|------------|
| Order Code | LNC-13LN165-S250+91CR-685-9-H13-M60-H-6 | |
| Line profile | Constant Intensity Distribution | |
| Line type | Laser Micro Line | |
| Wavelength | 685 +10/-10 nm | |
| Laser output power | 9 mW | |
| Laser safety class 3B | | |
| an angle α 1.7 deg | | |
| Focussing range | 249-249 mm | |
| Working distance | 249 mm | |
| Line length | ength 20 mm | |
| Line width | 0.017 mm | |
| Rayleigh range | 0.556 mm | |
| Edge intensity 75 % | | |
| iameter laser module 25/28 mm | | |
| Module length | 134.4 mm | |
| Installation length | 383.4 mm | |
| Cable length | 1.5 m | |
| Connector type | Lumberg SV50 IEC 61076-2-106 | |
| Supply voltage | 5 ± 0.25 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 | 2/0.3 µs | 1.5/0.1 μs |
| Rise / Fall time | 1/1 µs | 1/1 µs |
| Noise (< 1 MHZ RMS) 0.1 % | | |



ACCESSORIES

9D-12

Screwdriver WS 1.2

PS051003E

Power Supply 5 V

RELATED PRODUCTS

| LASER MODULES SERIES LNC-13LNM | Macro Line Generator, small fan angle Uniform intensity distribution Extended depth of focus Low noise |
|-----------------------------------|---|
| LASER MODULES SERIES 13LN | Micro Line, small fan angle Uniform intensity distribution Thin lines |
| LASER MODULES SERIES LNC-5LM | Micro Line, small fan angle Gaussian intensity distribution Low noise |
| LASER MODULES SERIES LNC-5LP | Micro Line, large fan angle Gaussian intensity distribution |

Low noise

This is a printout of the page <u>https://sukhamburg.com/products/details/LNC-13LN165-S250_91CR-685-9-H13-M60-H-6</u> from 5/7/2024

CONTACT

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