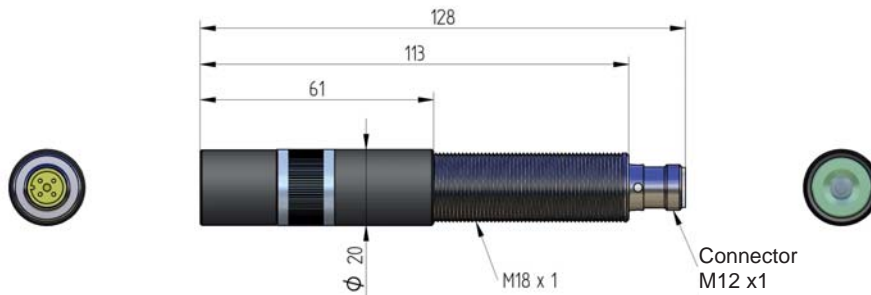


# ZM-18H

Vision, Analysis & Measurement

Z-LASER

Brand new product for high-end applications



## Features

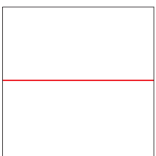
- 5-30VDC operation
- Powers up to 200mW
- Red, infrared, blue laser wave lengths available
- Gaussian, uniform and DOE optics available
- Simple, external hand focusing mechanism
- Up to 20MHz Analogue and TTL modulation together
- IP67 rated, fully water proof
- APC mode with current limit or constant current
- Logging of temperature, operation hours,.....
- Built-in micro controller and serial interface
- Thread mounted for simple and versatile mounting
- LED laser operation and pre-failure indicator
- Over voltage protection with surge/spike protection
- Reverse polarity protection

## Applications

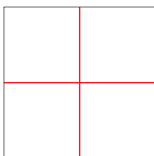
- Science
- Bio photonics
- Optical data transmission
- High-End adjusting and targeting system
- Lab application
- Machine Vision
- Machine construction
- Medical science
- Automotive industry
- 3D Measurement
- Metrology
- Spectroscopy
- Alignment / positioning

## Some available Optics

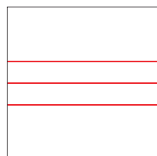
Line



Cross



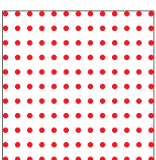
Parallel lines



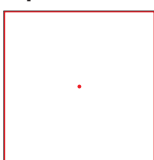
Dotted line



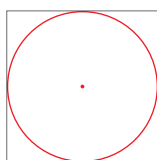
Dot matrix



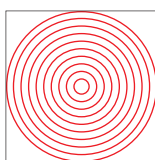
Square



Circle



10 Circles



- 1: voltage supply +
- 2: TTL mod.
- 3: voltage supply -
- 4: Ana mod.

## Mounting

H8-M18



# Specifications

## Optical

Optical stability	0,15% / °C
Wavelength vs. temperature	Typ. 0,25nm / °C (635nm - 980nm)
Range of focus	100mm up to ∞
Divergence of beam	≤ 1mrad (with dot optic)
Pointing stability	< 15μrad / °C

## Optics

Line (Gaussian profile)	60°, 90°, symmetrical or asymmetrical
Line (Non Gaussian profile)	10°, 20°, 30°, 45°, 60°, 90°
Point	elliptical or circular
DOE	see examples on front side

## Standard wavelengths and power (other on request)

405nm, 440nm, 635nm, 640nm, 643nm, 660nm 785nm, 808nm, 850nm, 980nm	up to 200mW depending on wavelengths
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## Electrical

Supply voltage	5-30VDC
Mode of operation	APC with current limiting or CC
Modulation	APC: < 5MHz (3db. i.e. TTL up to 1MHz, sinusoidal waves up to 5 MHz CC: < 20 MHz (3dB) diode depending
Protection	reverse polarity and transient/ESD, over temperature protection and LED pre-failure indicator
Connection	M12 plug, 4-pin

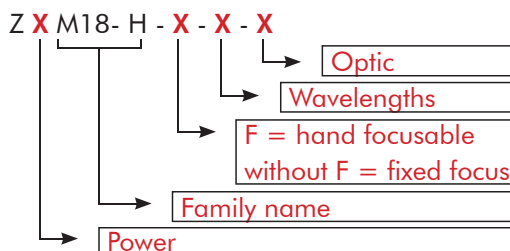
## Mechanical

Dimensions	128mm x Ø 20mm
Housing	Laser: M18 industry housing, chromed brass Optic head: anodised aluminium
Protection category	IP 67
Weight	ca. 87g
Electrical isolation	potential free housing

## Environmental conditions

Case temperature (with <b>Z-LASER</b> mounting)	-10°C up to +50°C (with mounting H8-M18)
Storage temperature	-10°C up to +80°C
Humidity	Max. 90%, non condensing
MTTF at 25°C	> 30.000h (635nm - 943nm) , > 5.000h (405, 440nm) > 100.000h (808nm + 980nm)

## Order code:



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**Z-LASER** Optoelektronik GmbH • Merzhauser Str. 134 • 79100 Freiburg • Germany  
Tel.: +49/761/296 44 44 • Fax: +49/761/296 44 55 • info@z-laser.de • www.z-laser.com