Z-LASER

Intelligent Solutions in Light

ZM18S3

- » Red or infrared wavelengths
- » Optical output power up to 120mW / 200mW IR
- » Gaussian/uniform line, dot optic, and various DOE optics
- » 5 to 30VDC supply voltage with reverse polarity protection
- » Analog intensity control and digital TTL Trigger up to 500kHz
- » M18 threaded body for simple and versatile mounting
- » Integrated microcontroller

Machine Vision

3D Measurement

Metrology

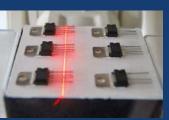
Medical





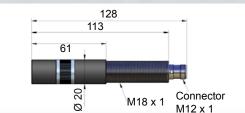








ZM18S3



	M12 x 1
Mechanical specifications	
Dimensions	128mm x Ø 20mm (focusable version) / 112mm x Ø 20mm (fixed focus)
Housing	M18 industry housing, chromed brass; optic head: anodised aluminium
IP rating	IP67
Weight	84g (focusable version)
Electrical isolation	Potential-free housing
Connection	M12 plug, 4-pin
Electrical specifications	
Supply voltage	5 to 30VDC
Operation mode	APC
Modulation	Analog intensity control and digital TTL Trigger up to 500kHz
Protection	Reverse polarity and transient protection / ESD, overtemperature protection and LED pre-failure indicator
Optical specifications	
Wavelength	640nm, 660nm, 785nm, 808nm, 830nm
Output power	Up to 120mW / up to 200mW IR
Wavelength vs. temperature	Typ. 0.20 - 0.30nm / °C depending on wavelength
Power stability	±3% over operating temperature range
Focus range	100mm up to ∞
Pointing stability	< 15µrad / °C
Line (Gaussian profile)	3°, 5°, 10°, 15°, 20°, 30°, 90°
Line (homogeneous intensity profile)	10°, 20°, 30°, 45°, 60°, 75°, 90°
Dot	Elliptical or circular
Environmental conditions	
Case temperature	-10°C up to +50°C (heat dissipation e.g. with mounting H8-M18)
Storage temperature	-10°C up to +80°C
Humidity	Max. 90%, non-condensing
MTTF at 25°C	> 30,000h (635nm to 660nm), > 100,000h (785nm to 980nm)

CE-Conformity according to the directives 2004/108/EC and 73/23/ECC.



