

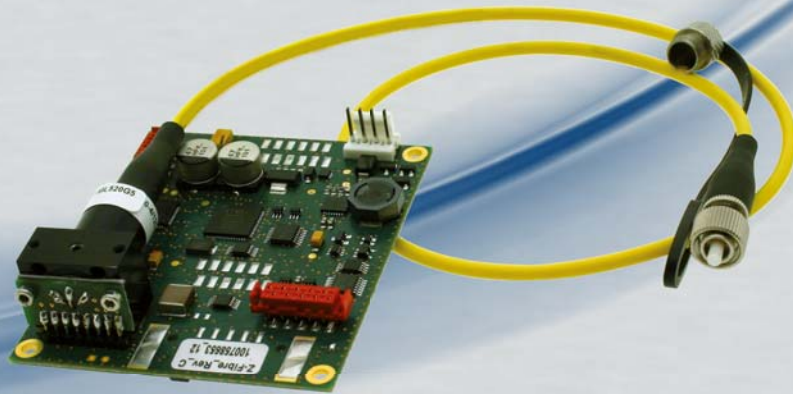
Z-LASER

Intelligent Solutions in Light

ZFSM

- » Red, green, blue and IR wavelengths
- » Optical output power up to 50mW
- » $M^2 < 1,05$
- » Unique line uniformity up to $< \pm 5\%$
- » 5 to 30VDC supply voltage
- » Analog and simultaneous TTL modulation up to 200kHz
- » Single-mode or multi-mode fibers with FC/PC connector
- » Fail-safe for medical/critical applications

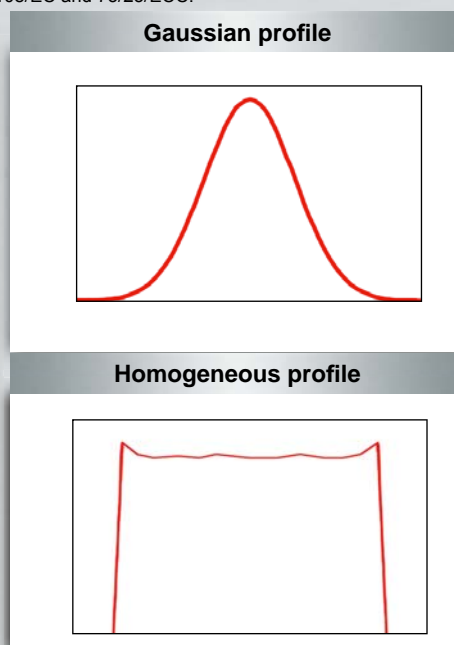
Machine Vision
3D Measurement
Biophotonics
Automotive
Machine construction
Medical
Metrology
Science & Research



ZFSM

Mechanical specifications	
Dimensions	PCB 70mm x 60mm Housing 105,25 x 82,5 x 36,6mm PCB or housing with FC / PC connector 450mm standard fiber length (others on request)
Connection	M12 plug 4-pin, D-Sub plug 9-pin
Electrical specifications	
Supply voltage	5 to 30VDC
Operation mode	Power stabilized (TEC in housing)
Modulation	Analog and simultaneous TTL modulation up to 200kHz
Protection	Reverse polarity and transient protection / ESD, over temperature protection and LED pre-failure indicator
Interfaces	I ² C, RS-232
Optical specifications	
Wavelength	450nm, 520nm, 640nm, 660nm, 785nm, 830nm, others on request
Output power	Up to 50mW
Wavelength vs. temperature	Typ. 0.20 - 0.30nm / °C depending on wavelength
Power stability	< 1% in steady state (1h)
Focus range	20mm up to ∞ (depending on optic head)
Pointing stability	< 3μrad / °C
Boresight error	< 3mrad
Line (Gaussian profile)	3°, 5°, 10°, 15°, 20°, 30°, 90°
Line (homogeneous intensity profile)	1°, 5°, 10°, 20°, 30°, 45°, 60°, 75°, 90°
Dot	Circular
M ²	SM < 1,05
Classification	IEC 60825-1:2007 IEC 60601-2-22 (for laser classes 3R and 3B) Software according to IEC 62304
Environmental conditions	
Case temperature	0°C up to +50°C (PCB version); -10°C up to +50°C (version with housing)
Storage temperature	-20°C up to +80°C
Humidity	Max. 90%, non-condensing (version with housing)
MTTF at 25°C	> 10,000h


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



Optics

Order code

Z X FSM - X - X - FA X - X
 | | | | |
 Power Wavelength G = Housing Fiber length Optic


 Product family name