

793nm Fiber-coupled Diode Laser

By adopting specialized fiber-coupling techniques, the manufactured diode laser modules have a high efficiency, stability and superior beam quality. The modules are achieved by transforming the asymmetric radiation from the laser diode chip into an output fiber with small core diameter by using special micro optics. Inspection and burn-in procedures guarantee reliability, stability and long lifetime of each modules.



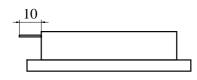
Features

- 16W CW output power
- 105µm fiber core diameter
- Feedback protection
- Photodiode and thermistor

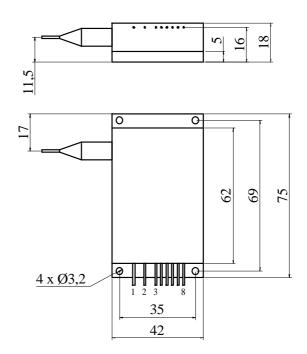
Applications

- 2µm laser laser pumping
- Medical equipment

Package dimension (mm)



Function	Pin
LD+	1
LD -	2
PD (N)	3
PD (P)	4
NTC	5
NTC	6
N.C.	7
N.C.	8

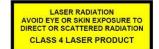




Tel.: +49-30-83409380 Fax: +49-30-83409381 info@photontec-berlin.com www.photontec-berlin.com









Module Specifications

Model	M793±3-16-F105/22-C1
Optical parameters	
Output power (W)	16
Central wavelength (nm)	793
Wavelength tolerance (nm)	± 3
Spectral width (FWHM, nm)	< 3.0
Wavelength temp. coefficient	0.35
Fiber parameters	
Fiber core diameter (µm)	105
Numerical aperture	0.22
Fiber length (m)	1
Electric parameters	
Threshold current (typical, A)	0.5
Operating current (typical, A)	2.5
Operating voltage (typical, V)	16.0
Slope efficiency (typical, W/A)	8.0
Power conversion efficiency	40%
Back reflection protection	
Wavelength range (µm)	1750 - 2200
Attenuation (dB)	>40
Accessories	
Thermistor	$10\mathrm{k}\Omega$ @ $25^{\circ}\mathrm{C}$
Other parameters	
Operating temperature (°C)	10 - 30
Operating humidity (%)	< 75
Storage temperature (°C)	-20 – +80
Soldering temperature (°C)	250 (10s)
Dimension (without fiber, mm)	75 x 42 x 18

Notes: 1. Module specifications and dimension are subject to change without notice.

- 2. ESD precautions must be taken.
- 3. The minimum fiber bend diameter should be 300 times greater than the fiber core diameter.
- 3. Reduced lifetime if improperly used or used above operating conditions.
- 4. A non-condensing environment is required for storage and operation below the ambient dew point.

Compliance with Regulatory Requirements: This industrial laser is an OEM version of a laser diode. As such, it is intended only for integration into other equipment. This laser does not comply with IEC and CDRH requirements. The customer is responsible for IEC and CDRH certifications of the system that incorporates this industrial laser.



