

LuOcean Mini

Diode Laser @ 785nm - 1470nm up to 50W



Description:

The Lumics LuOcean™ Mini Diode Laser series offers OEM integrators an excellent product to manufacture state-of-the-art end user laser systems. The easy integration and safe use of these laser components gives the chance to be cost-efficient in development and manufacturing. Equipped with several accessories and features the Lumics diode lasers comply with CE, FDA & ROHS requirements. Lumics warrants highest reliability single emitter technology through careful design, extensive burn-in, long life-time & thermal testing.

Features

- Red pilot laser
- Fiber sensor
- Power monitor
- Exchangeable safety window
- Temperature sensor
- Up to 3 independently controllable wavelengths
- SMA905 connector on case with detachable fiber

Qualities

- Burn-in tested single emitters
- Sealed casing
- Ultra-long lifetime
- Low laser diode current

Benefits

- Ultra-compact design
- FDA-required sensors
- All sensors also two-fold available for redundancy

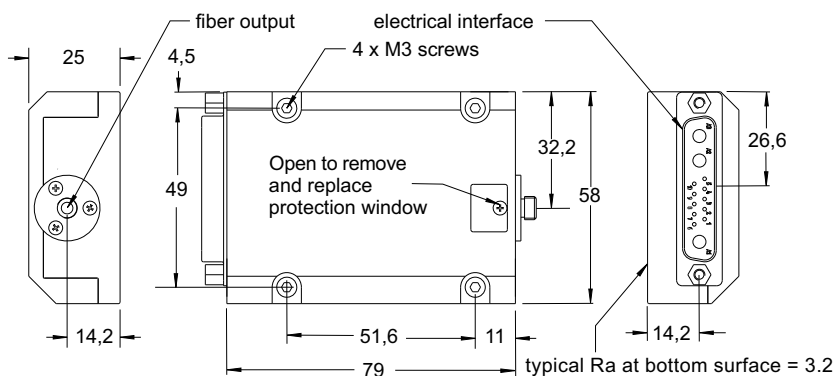
We manufacture diode lasers.

Typical laser specifications at 25°C

(More details can be found on the specific datasheet on our webpage)

Wavelength [nm]	Fiber Diameter [μm]	max. Power [W]	Operating Current [A]
785/808	200	14	7.0
785/808	600	27	13.0
940/975	200	35	15.8
940/975	400	50	24.0
1064	200	30	14.0
1470	200	12	13.0
1470	400	17	21.0
1470 + 9xx (mixed)	400	10.5 + 16	21 + 24.0

Module Drawing (Dimensions in mm)

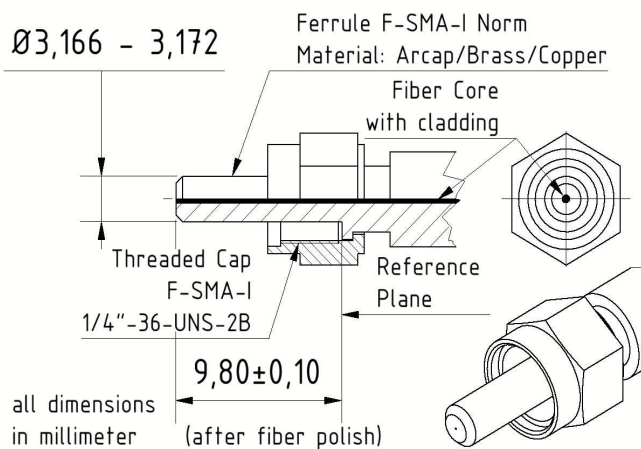


Fiber Connector

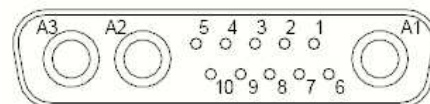
(1) Lumics laser diode fiber coupling technology ensures loss into the fiber cladding of <2% of the total power if the fiber centricity is below 10μm and ferrule diameter and distance of the fiber end facet to the reference plane complies with shown technical drawing. Use a fiber microscope to check for dust free fiber end facet and fiber centricity.

(2) Free standing fibers suffer from higher risk of fiber damage to the fiber tip due to mechanical stress by handling and the fiber end facet can not be polished as simple as for not free standing fibers.

(3) For more information see http://www.lumics.de/wp-content/uploads/lu_fiber_patchcords.pdf



Connector

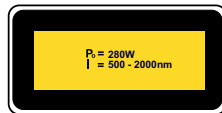


Pin Connections

Pin	Configuration
1	Fiber sensor signal 1 *
2	Fiber sensor signal 2 *
3	Fiber sensor / monitor diode cathode 12V
4	Fiber sensor (GND1) LM35 (GND1) Monitor diode (GND1)
5	LM35 signal or NTC or PT100/1000
6	Monitor diode signal 2 *
7	Monitor diode signal 1 *
8	Pilot laser (GND2)
9	LM35 5V or NTC or PT100/1000
10	Pilot laser 3.3V *
A1	Laser diode (+)
A2	Laser diode cathode (-)
A3	N.C.

* = optional

User Safety



Important Note Read and carefully follow operating manual instructions. Especially, whenever power supply is switched on or off, always disconnect from laser module. See manual for details. Uncontrolled on / off switching may cause spikes and result in fatal device damage. This product is not certified by with IEC 60825-1 or 21CFR1040.10/21CFR1040.11 and and must comply with the applicable regulations by the Purchaser if sold as laser product.

We manufacture diode lasers.