

LiOM S10/15

Fiber-coupled LiDAR Laser



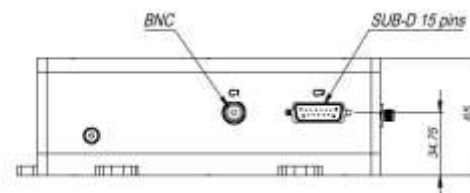
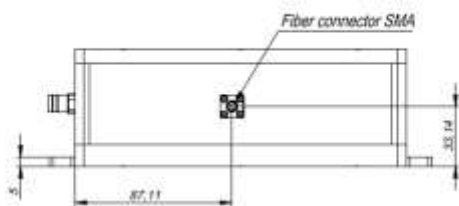
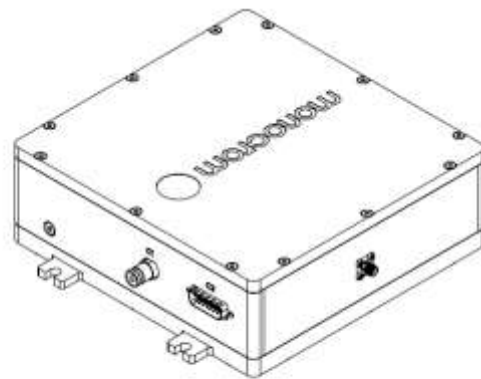
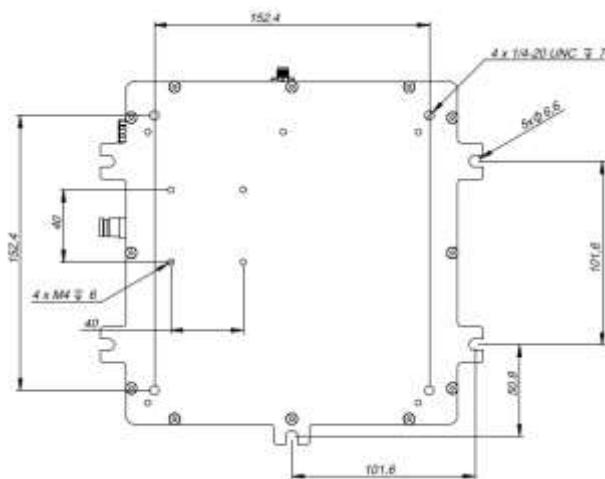
Features:

- Long lifetime
- High reliability
- Low thermal resistance
- Wide storage temperature -10 to 60 °C
- Available with square shaped top-hat beam profile

Suitable for:

- Pumping
- Illumination
- Industrial
- LiDAR

Outline LiOM S10/15



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Product specification are subject to change without notice.
For complete details, please contact your local MONOCROM sales representative.

UNE EN ISO 9001:2015

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Laser parameters^(1,2,3)	S10	S15
Type	fiber-coupled module	
Wavelength ⁽⁴⁾ [nm]	1060 ±10	1550 ±10
Spectral width (FWHM) [nm]	5	15
Peak power from 600 µm fiber, QCW [W]	9	5
Slope efficiency [W/A]	0.85	0.5
Repetition rate [Hz]	CW up to 500	
Pulse length [ms]	0.1 up to CW	
Max duty cycle [%]	100	
Electrical parameters		
Driver electronics	included	
Operating current [A]	12	15
Threshold current [A]	0.6	2.1
Voltage @ connectors ⁽⁵⁾ [V]	15	
Electrical connection	SUB-D-15	
Trigger connection	BNC	
Trigger input	5 V TTL @ 50 Ohms	
Trigger signal duration	equal to pulse duration desired	
Trigger signal to power transfer function	linear: 0 – 5 V ± 0-100 %	
E-O conversion efficiency [%]	> 50	> 20
Optical fiber⁽⁶⁾		
Fiber core diameter [µm]	600 × 600	
Numerical aperture	0.20	
Fiber collimator	optional	
Clear aperture [mm]	optional	
Beam diameter ⁽⁷⁾ [mm]	optional	
Residual divergence ⁽⁸⁾ [°] / [mrad]	optional	
Fiber length [m]	optional	
Fiber input connector	HP-SMA 905	
Other parameters		
Operating temperature [°C]	non-condensing to 55	
Storage temperature [°C]	between -10 and 60	
Thermal stabilization	TEC	
Driver for thermal stabilization	included	
Lifetime [h]	> 20000	
Laser class product (EN-60825)	4	

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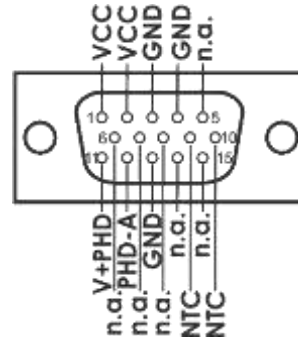
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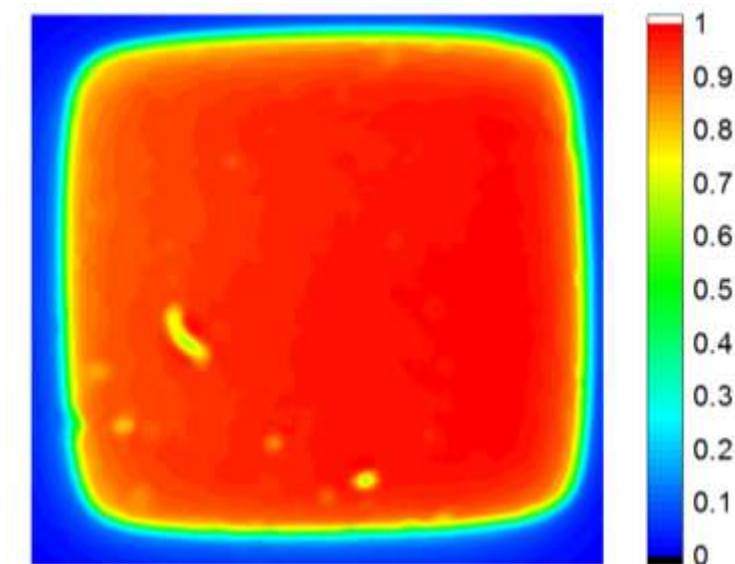
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Pin layout for electrical connections between laser head and electronics

SUB-D-15	
Pin number	Description
1	VCC
2	VCC
3	GND
4	GND
5	n.c.
6	n.c.
7	n.c.
8	n.c.
9	NTC
10	NTC
11	MPD +
12	MPD -
13	GND
14	n.c.
15	n.c.



Beam profile example after square shaped fiber



1. Specifications at 20 °C, at the beginning of the lifetime.
2. If any other requirements are needed, please contact us.
3. QCW: with integrated driver electronics.
4. Other wavelengths are also available.
5. Other supply voltages are available up on request.
6. Other specifications on request. Fiber core, fiber length and fiber connector can be adapted to customers' demands.
7. Beam diameter is determined via $1/e^2$ value.
8. Divergence is determined via FWHM value.

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