

# Encapsulated Actively Cooled Laser Stack

## ENCAST-10

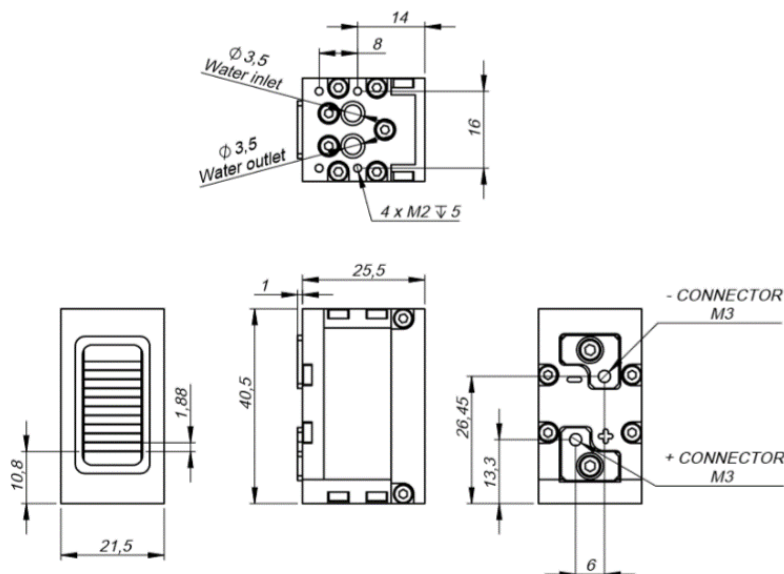
### Features:

- Actively cooled pulsed direct beam
- Clamping™ Patented Technology (Solder free mounting of laser bars)
- Long lifetime
- High reliability
- Low thermal resistances
- Wide storage temperature - 40° C to + 85° C
- No “smile” effect

### Suitable for:

- Medical
- Industry

### Outline ENCAST-10 laser bars



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

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<b>Laser<sup>(1,2)</sup></b>	
Type	actively cooled stack
Wavelength <sup>(3)</sup> [nm]	760 / 808 / 1064
Wavelength tolerance [nm]	± 20
Output power per laser bar [W]	200
Operating current <sup>(4)</sup> [A]	up to 200
Voltage @ connectors <sup>(5)</sup> [V]	~ 20
Numbers of laser bars	10
Pitch (bar 2 bar) [mm]	1.8
<b>Module<sup>(6)</sup></b>	
Output power [W]	1000 up to 2000
Coolant flow [l/min]	2.7
Duty cycle	up to 50%
Coolant pressure [bar]	3.0
Coolant	90% distilled water + 10% ethyleneglycol
Coolant conductivity [ $\mu$ S/cm]	5
Electrical connections	threads M3
Water connections	water fittings for Ø3.5 mm tube
Water temperature [°C] <sup>(9)</sup>	~ 20
Weight <sup>(7)</sup> [g]	< 120
Package dimensions (HxWxL) [mm]	40.5 x 25.5 x 21.5
Expected lifetime <sup>(8)</sup>	10 <sup>8</sup> pulses

1. Specifications at 20 °C, at the beginning of the lifetime.
2. If any other requirements are needed, please contact us.
3. Combination is also available.
4. Normal max current is 180 A.
5. Voltage from the power supply must be higher, as due to high current there will be a voltage drop in the cables.
6. Optics and cooling adaptation are available.
7. With no optics.
8. Reduced lifetime if use in conflict to the nominal operational conditions.
9. Water temperature can be between 19°C to 23°C

<b>Validated Modes</b>	<b>1 Hz</b>	<b>3 Hz</b>	<b>5 Hz</b>	<b>10 Hz</b>	<b>20 Hz</b>
5 ms	2000 W	2000 W	2000 W	2000 W	2000 W
10 ms	2000 W	2000 W	2000 W	2000 W	1000 W
30 ms	2000 W	2000 W	1000 W	1000 W	1000 W
100 ms	1000 W	1000 W	1000 W		
300 ms	1000 W				
400 ms	1000 W				

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UNE EN ISO 9001:2015

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