Actively Cooled Laser Bar Stack

*A-Stack* $\lambda 960-980$ nm

**Features:**
- Improved cooling efficiency
- No “smile” effect
- Bars on demand
- Central wavelength on demand

**Suitable for:**
- Hair removal
- Surgical cardiology
- Ophthalmology
- Interstitial laser induced thermotherapy
- Odontology
- Material processing
- Printing

*A-Stack* $\lambda 960-980$ nm

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**A-STACK / 960-980 nm**

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

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UNE EN ISO 9001:2015
**A-Stack λ 960-980 nm | TECH Specifications**

<table>
<thead>
<tr>
<th>Laser Parameters$^{(1,2,3,4)}$</th>
<th></th>
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</thead>
<tbody>
<tr>
<td><strong>Type</strong></td>
<td>actively cooled stack</td>
</tr>
<tr>
<td><strong>Wavelength$^{(5)}$ [nm]</strong></td>
<td>960 - 980</td>
</tr>
<tr>
<td><strong>Wavelength tolerance [nm]</strong></td>
<td>±20</td>
</tr>
<tr>
<td><strong>Spectral width [nm]</strong></td>
<td>4</td>
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<tr>
<td><strong>Wavelength shift [nm/K]</strong></td>
<td>0.4</td>
</tr>
<tr>
<td><strong>Output power$^{(4,6)}$ [W]</strong></td>
<td>CW - up to 150 / QCW - up to 400</td>
</tr>
<tr>
<td><strong>Operating current [A]</strong></td>
<td>CW &lt; 160 / QCW &lt; 380</td>
</tr>
<tr>
<td><strong>Efficiency coefficient [W/A]</strong></td>
<td>1.1</td>
</tr>
<tr>
<td><strong>Voltage @ connectors$^{(7)}$ [V]</strong></td>
<td>1.8 / laser bar</td>
</tr>
<tr>
<td><strong>Bar to bar pitch [mm]</strong></td>
<td>down to 1.5</td>
</tr>
<tr>
<td><strong>Optics (optional)</strong></td>
<td>FAC / SAC / BT</td>
</tr>
<tr>
<td><strong>Bars per stack$^{(8)}$</strong></td>
<td>1 - 15</td>
</tr>
<tr>
<td><strong>Smile [µm]</strong></td>
<td>&lt; 0.3</td>
</tr>
</tbody>
</table>

1. This is a preliminary specification sheet; validation of specification is in process.
2. If any other requirements are needed, please contact us.
3. Specifications at 20 ºC, at the beginning of the lifetime.
4. Specification are subjected to chips availability.
5. Other wavelengths on request.
7. Voltage from the power supply must be higher, as due to high current there will be a voltage drop in the cables.
8. Pitch dependent.

**Macro-channels**

Our patented solder-free technology is used in our diode bars stacks; no water obstructions thanks to the use of macro-channels.

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