

***C-Stack* λ960-980 nm**

- Hair removal
- Surgical cardiology
- Ophthalmology
- Interstitial laser induced thermotherapy (Cancer)
- Odontology
- Material processing
- Printing

Technical drawing of the Laser Bar assembly, showing front, top, and side views, and detailed views A and B.

Front View: Shows a rectangular assembly with a total height of 25.65 and a width of 25. A circular detail A is indicated on the right side.

Top View: Shows a rectangular assembly with a total width of 27.6 and a height of 12. A circular detail B is indicated on the right side.

Side View: Shows a rectangular assembly with a total height of 21.15 and a width of 2.25. It includes two connector points labeled "CONNECTOR M2 $\pm$ 3".

DETAIL A (4:1): A magnified view of the circular detail A, showing a laser bar with a diameter of 10 (LASER BAR) and a thickness of 1.

DETAIL B (4:1): A magnified view of the circular detail B, showing a laser bar with a diameter of 5.9 and a thickness of 1.5.

Isometric View: Shows the assembly from a 3D perspective, highlighting the laser bar and the connector points.

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C-Stack λ 960-980 nm I TECH Specifications

Laser Parameters^(1,2,3,4)

Type	conductively cooled stack
Wavelength ⁽⁵⁾ [nm]	960 - 980
Wavelength tolerance [nm]	± 5
Spectral width, FWHM [nm]	< 5
Wavelength shift [nm/K]	0.38
Output peak power, QCW ^(4,6) [W]	up to 400 / laser bar
Operating current [A]	< 380
Differential slope, after threshold [W/A]	1.1
Voltage @ connectors ⁽⁷⁾ [V]	2 - 33
Bar to bar pitch [mm]	down to 1.4
Optics (optional)	FAC / SAC / BT
Bars per stack ⁽⁸⁾	1 - 16
Smile [μ m]	< 0.3

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 °C, at the beginning of the lifetime.
4. Specification are subjected to chips availability.
5. Other wavelengths on request.
6. Expected output power per laser bar. Can varies based on current and temperature.
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.

No Mechanical Stress

Our patented solder-free technology is used in our diode bars stacks. Thanks to it clamped bars expand and contract freely during the thermal cycles of the pulsed regime avoiding mechanical stress.



C-STACK / 960-980 nm
Version: 1.0.0.0
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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