

MET R9

Direct Diode Laser Module

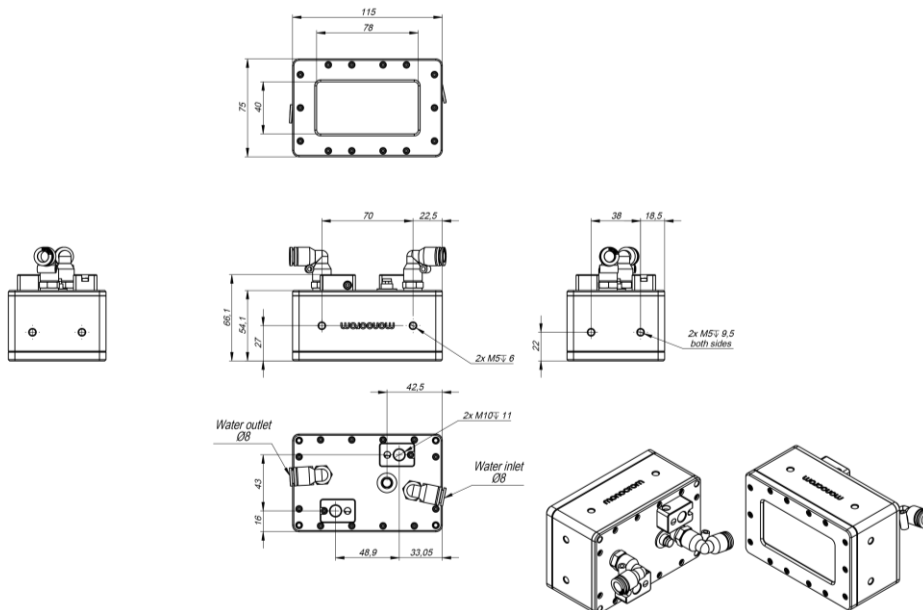
Features:

- Actively cooled direct beam source
- 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:

- Heat assisted material processing
- Roll-forming
- Spin-forming
- Metal hardening
- Metal softening

MET R9



MET R9

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

MONOCROM S.L.

C/Vilanoveta 6
08800 Vilanova i la Geltrú (Barcelona)
Spain
T. +34 938 149 450
F. +34 938 143 767
E. sales@monocrom.com
www.monocrom.com

MET R9 | TECH Specifications

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

Wavelength ⁶ [nm]	940
Wavelength tolerance [nm]	± 20
Optical power [W]	2000
Operating current [A]	125 (135 max.)
Voltage @ connectors ⁶ [V]	<12
Laser bars per stack	6
Stack per unit	3
Smile [µm]	< 0.3

Optics

Working distance [mm]	150 – 180
Depth of field [mm]	± 2
Line width ⁽⁷⁾ [mm]	< 1
Line length ⁽⁸⁾ [mm]	50 – 55
Irradiance at target area [W/mm ²]	~ 35

Operating parameters⁽⁹⁾

Coolant flow [l/min]	4.5 – 5
Coolant pressure [bar]	5
Coolant temperature [°C]	18 – 20
Coolant	90% DI water + 10% ethyleneglycol

Body

Weight [kg]	1.5
Package dimensions (W × H × L) [mm]	see outline
Electrical connections	threads M6
Water connections	2× 8 mm push-in connectors
Expected lifetime [h]	15000

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. Voltage from the power supply must be higher, as due to high current there will be a voltage drop in the cables
7. Measured at FW95% energy.
8. Determined by taking 1σ values.
9. Values for related to coolant properties are recommendations. External chiller is needed.

MET R9

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

UNE EN ISO 9001:2015

MONOCROM S.L.

C/Vilanoveta 6
08800 Vilanova i la Geltrú (Barcelona)
Spain
T. +34 938 149 450
F. +34 938 143 767
E. sales@monocrom.com
www.monocrom.com