



CiOM Select

Diode Pumped Solid State Laser

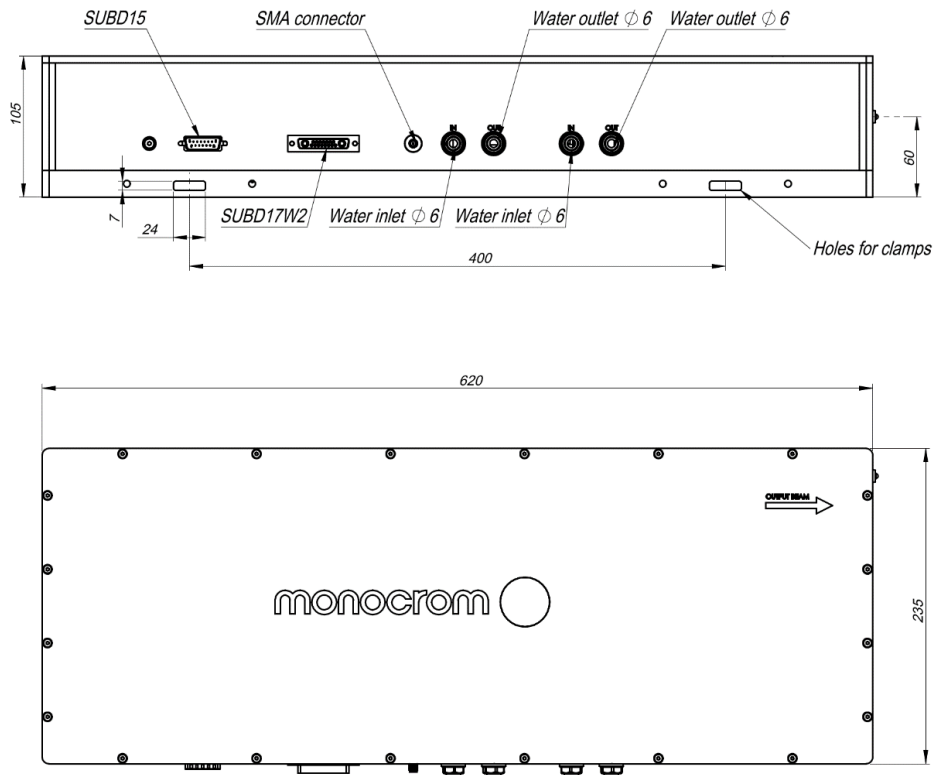
Features:

- Versatile laser system with enlarged parameter space
- Pulses of 40 – 50 ns with up to 1 mJ in energy @ 351 nm
- Single exit window for: 1053 & 526.5 & 351 nm
- Wavelength selection on demand
- Rep. rate via internal clock: 1 – 5 kHz
- Rep. rate range 1 – 20 kHz is possible with variable pulse length

Suitable for:

- Ophthalmology
- Material processing
- 3D printing
- LIBS
- LiDAR
- OPO pumping

Outline CiOM Select



CiOM Select

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

CiOM Select I TECH Specifications

| Laser Parameters^(1,2,3) | | Triple Wavelengths Laser System | |
|---|------------|---|------------|
| Type | | Diode Pumped Solid State Laser | |
| Repetition Rate ⁽⁴⁾ [kHz] | | 1 – 5 | |
| Wavelength ⁽⁵⁾ [nm] | 1053 | 526.5 | 351 |
| Wavelength Tolerance [nm] | | ±0.5 | |
| Average Output Power ⁽⁶⁾ [W] | 8 | 4 | 2.5 |
| Power Adjustment Range [%] | | 0 – 100 | |
| Pulse Energy ⁽⁶⁾ [μJ] | up to 4 mJ | up to 2 mJ | up to 1 mJ |
| Pulse Width, FWHM ⁽⁷⁾ [ns] | | 40 – 50 | |
| Beam Quality [M ²] | | < 1.5 | |
| Far Field Beam Divergence [mrad] | | 2 – 3 | |
| Beam diameter, 1/e ² [mm] | | 2 – 3 | |
| Laser Beam Pointing Stability [μrad] | | < 50 | |
| Power Stability | | < 1% @ 8 h | |
| Pulse to Pulse Stability | | < 1% rms | |
| Operating parameters⁽⁸⁾ | | | |
| Diode Lifetime ⁽⁹⁾ [h] | | 20000 | |
| Operating Current, Oscillator [A] | | up to 25 | |
| Operating Voltage, Oscillator [V] | | 12 | |
| Wavelength selection (1053 / 526.5 / 351) | | remote | |
| Repetition rate selection | | internal (1, 2, 3, 4, 5 kHz) or external (stepless) | |
| Colling solution | | chiller (optional) | |
| Coolant | | 90% DI water – 10% entylenglycol | |
| Coolant Flow [l/min] | | < 1.5 | |
| Coolant Inlet Pressure [bar] | | 3 | |
| Coolant Temperature [°C] | | 20 – 30 | |
| Water Connections | | 6 mm push-in | |
| Warm Up Time ⁽¹⁰⁾ [min] | | < 2 | |

CiOM Select

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

Module

| | |
|------------------------------------|---------------------------------------|
| Operating Temperature [°C] | non-condensing - 40 |
| Storage Temperature [°C] | between 5 and 60 |
| Laser Head Dimensions (L × W × H) | 620 × 235 × 108 |
| Electronics Dimensions (L × W × H) | 19-inch – 3 HU |
| Injection Current for Oscillator | variable via potentiometer and remote |
| External Trigger | IN/OUT (2 × BNC) |
| Electrical Supply | 110 – 250 VAC @ 50/60 Hz |
| Laser class product (EN-60825) | 4 |

1. This is a preliminary specification sheet; validation of specification is in process.
2. Specifications at 25 °C, at the beginning of the lifetime.
3. If any other requirements are needed, please contact us.
4. Other operational frequencies are feasible. Pulse energy may change.
5. Other wavelengths on request.
6. Value varies with rep. rate.
7. Pulse shape will be a Gaussian-Lorentzian mixture.
8. Cooling requirements are recommendations. An external chiller is needed.
9. Reduced lifetime if use in conflict to the nominal operational conditions.
10. Reaching 90% of output power.

CiOM Select

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