



High Energy Solid State Laser

HiEn-PuLS-X5400-YAG

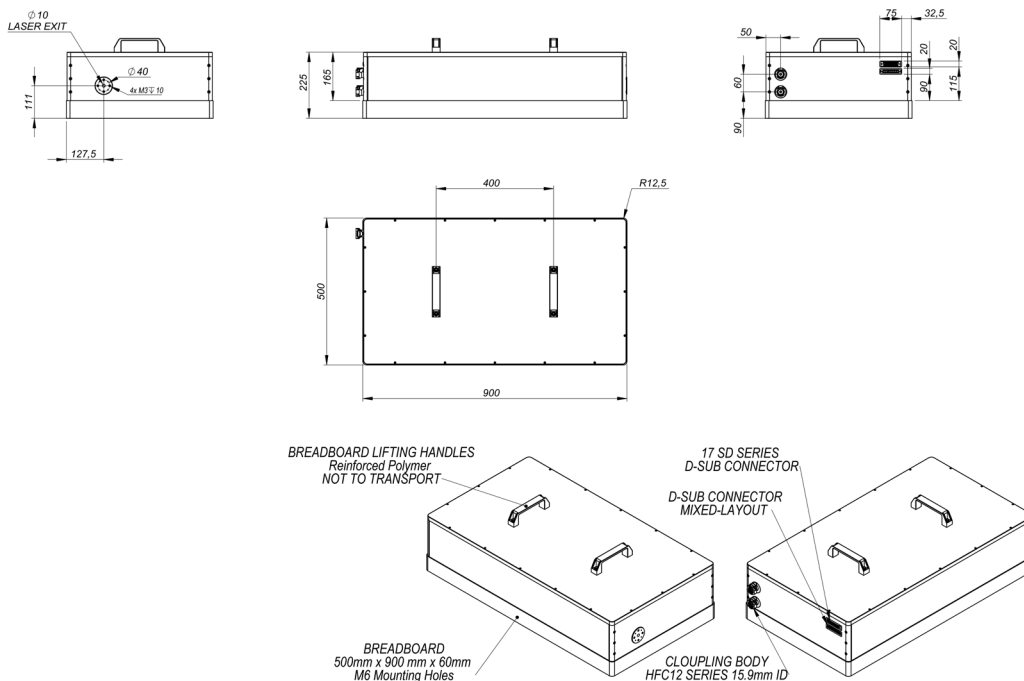
Features:

- Long lifetime
- High reliability
- Low thermal resistances
- Wide storage temperature + 5°C to + 60°C
- No SMILE effect

Suitable for:

- Material processing
- LIBS/RAMAR/IR Spectroscopy
- OPO/DYE/Ti: Sa Laser pumping
- LIDAR & WIND LIDAR

HiEn-PuLS-X5400-YAG I outline



High Energy Solid State Laser
HiEn-PuLS-X5400-YAG

Version: 1.0.0.0

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

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HiEn-PuLS-X5400-YAG I TECH SPECIFICATIONS

	HiEn-PuLS- 15400-YAG	HiEn-PuLS- 25400-YAG	HiEn-PuLS- 35400-YAG	HiEn-PuLS- 45400-YAG	HiEn-PuLS- 55400-YAG
Laser Parameters ^(6,8)					
Fundamental Wavelength	1064 nm				
Repetition Rate ⁽¹⁾	1 – 1000 Hz				
Energy Output at 1053 nm ⁽²⁾	100 mJ	250 mJ	500 mJ	750 mJ	1000 mJ
Energy Output at 527 nm	60 mJ	150 mJ	300 mJ	375 mJ	600 mJ
Energy Output at 351 nm	35 mJ	85 mJ	175 mJ	260 mJ	360 mJ
Pulse Width ⁽³⁾	4 – 25 ns				
Power Stability ⁽⁴⁾	< 1% @ 8 h	< 1% @ 8 h	< 1% @ 8 h	< 1.5% @ 8 h	< 1.5% @ 8 h
Pulse to Pulse Stability ⁽⁴⁾	< 5% rms				
Beam Parameters ^(4,8)					
Divergence	< 1 mrad				
Beam Quality M ²	3	5	7	9	11
Beam Diameter	6 mm				
Beam Ellipticity	> 95%				
Pointing Stability	50 µrad				
Polarization Ratio	100:1				
Jitter ⁽⁷⁾	< 1.5 ns				
Operating Parameters ⁽¹¹⁾					
Diode Lifetime ⁽⁹⁾	20000 h				
Coolant Flow	< 1.5 l/min	< 3.0 l/min	< 4.5 l/min	< 6.0 l/min	< 7.5 l/min
Coolant Pressure	< 3.5 bar				
Coolant	90% Distilled water + 10% ethylene glycol				
Warm Up Time ⁽¹⁰⁾	< 2 min				
Operating Temperature	20 – 35 deg				
Additional Parameters					
Weight (Laser Head)	< 30 Kg				
Weight (Electronics)	< 10 Kg				
Laser Head Dimensions (L x W x H)	600 mm 300 mm 220 mm	600 mm 500 mm 220 mm	900 mm 500 mm 220 mm	1000 mm 500 mm 220 mm	1100 mm 500 mm 220 mm
Communications	RS232 / USB				
External Trigger	IN / OUT				
Laser class product (EN-60825)	4				

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1. Repetition rate influences maximum pulse energy and vice versa.
2. Per pulse.
3. 5 – 10 ns for OPO.
4. Valid for the fundamental wavelength.
5. Specifications at 25 °C, at the beginning of the lifetime.
6. All specs can be customized.
7. If any other requirements are needed, please contact us.
8. Reduced lifetime if use in conflict to the nominal operational conditions.
9. Reaching 90% of output power.
10. Optics and cooling adaptation are available.
11. External cooling water circuit or chiller is needed. The values are recommendations.

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UNE EN ISO 9001:2015

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