

MOPA 1064-2000mW

Diode pumped passively Q-switched solid state laser

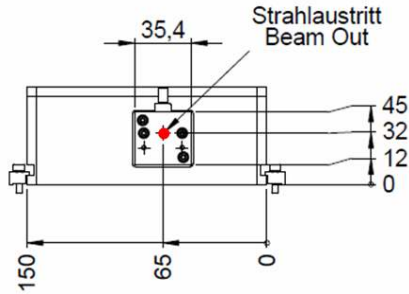
- 1064 nm
- Single Pulse
- < 1.6 ns
- 1 – 20 kHz
- > 2000 mW
- External / Internal Trigger Mode



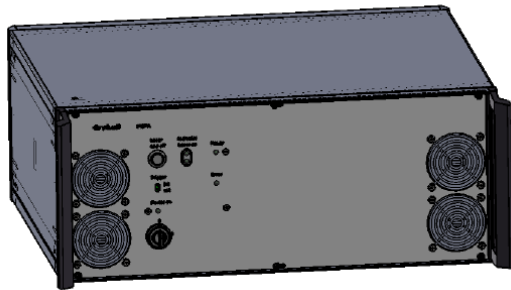
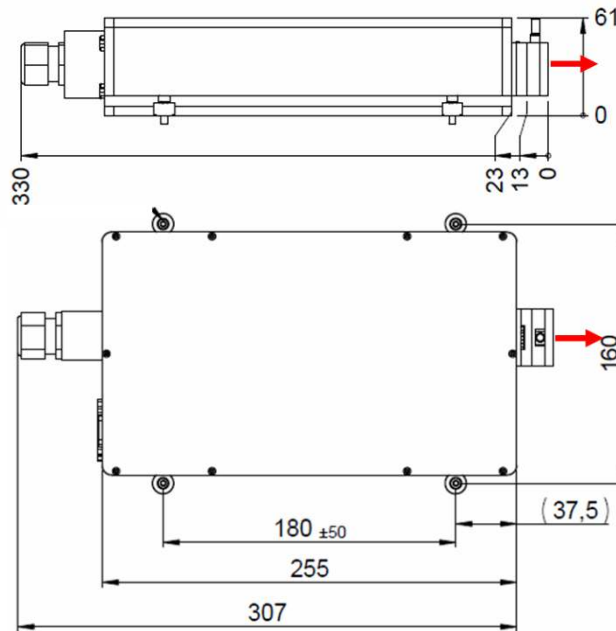
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| Optical Data | Wavelength | 1064 nm |
| | Average Power | > 2000 mW @ 15 kHz |
| | Pulse Energy | > 140 µJ @ 15 kHz |
| | Beam Divergence (full angle) | < 6.0 mrad |
| | Beam Ellipticity | < 2:1 |
| | Beam Diameter | 0.7 ± 0.3 mm (at laser exit) |
| | Spatial Mode | TEM ₀₀ |
| | Pulse Repetition Rate (with external trigger) | 1 Hz - 20 kHz |
| | Pulse Width (FWHM) | < 1.6 ns |
| | Polarization Ratio | > 100:1, vertical |
| | Pulse Energy Drift ¹⁾ | < ± 3 % @ 15 kHz |
| | Pulse-to-Pulse Energy Stability ²⁾ | < 10 % rms @ 15 kHz |
| | Laser Classification | 4 / IV |
| | Optical Output | Free Beam |
| Electrical Data | Electrical Power Consumption | < 250 W |
| | Line Voltage | 100 - 240 V AC (50-60 Hz) |
| Interface | USB | |
| | BNC connector for external triggering (TTL) | |
| | SMB connector for 24 V DC output | |
| Miscellaneous | Warm-up Time | < 10 min |
| | Operating Temperature | 18 - 38 °C |
| | Laser Head Size | 61 x 150 x 330 mm (H x W x L) |
| | Stand Alone Unit Size | 184 x 449 x 375 mm (H x W x L) |
| Options | External telescope (beam expander) or multimode fiber coupling | |
| | Manual or electrical attenuator | |
| | Synchronization signal output (rise time < 2 ns) | |
| | Electrical beam blocker | |
| ¹⁾ Drift over 8 hours, energy averaged over 10 sec after 5 min of continuous operation, temperature variation ± 3 °C and < 3 °C/hour, with activated closed loop control for the pulse energy ²⁾ RMS over 1000 pulses after 5 min of continuous operation. | | |

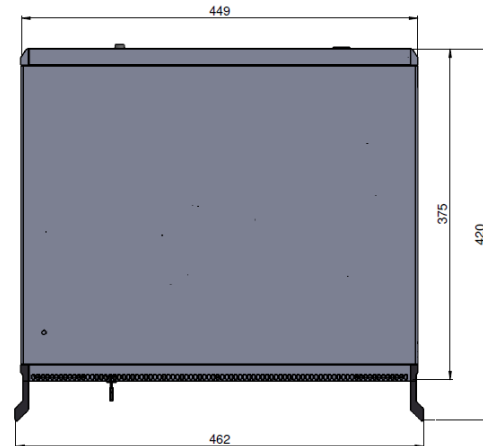
Laser Head and Controller



Laser Head
(height = 61; width = 150; length = 255
core dimensions in mm)



Stand Alone Unit
(height = 184, width = 449; length = 375
core dimensions in mm)



Laser Safety Labels

The MOPA 1064-2000mW lasers are class 4 / IV according to IEC 60825-1:2014

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| <p>wavelength: 1064 nm max. output: 4000 mW pulse duration: < 1.6 ns max. repetition rate: 20 kHz</p> <p><small>Complies with IEC 60825-1:2014 Complies with 21CFR 1040.10 and 1040.11 except for deviations pursuant to Laser Notice No. 50, dated July 26, 2001</small></p> | <p>DANGER - INVISIBLE LASER RADIATION AVOID EYE OR SKIN EXPOSURE TO DIRECT OR SCATTERED RADIATION</p> <p>CLASS 4 LASER PRODUCT</p> | <p>LASER RADIATION IS EMITTED FROM THIS APERTURE</p> |
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