

FQSS 213-50

Diode pumped passively Q-switched solid state laser

- 213 nm
- single pulse
- ≤ 1.3 ns
- 1 – 30 Hz
- $> 50 \mu\text{J}$ @ 20Hz



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|--|---|---|
| Optical Data | Wavelength | 213 nm |
| | Beam Divergence (full angle) | < 1.5 mrad |
| | Beam Ellipticity | $< 2:1$ |
| | Beam Diameter | $450 \pm 150 \mu\text{m}$ (at laser exit) |
| | Peak Power | > 40 kW @ 20 Hz |
| | Pulse Energy | $> 50 \mu\text{J}$ @ 20 Hz |
| | Pulse Repetition Rate (with external trigger) | 1 - 30 Hz |
| | Pulse Width (FWHM) | ≤ 1.3 ns |
| | Polarization Ratio | $> 100:1$, horizontal |
| | Long term pulse energy stability (6 hours) ¹⁾ | $< \pm 5$ % |
| | Pulse-To-Pulse Stability ²⁾ | < 3 % rms |
| | Laser Classification | 4 / IV |
| | Residual Emission (266nm, 532nm, 1064nm) | $< 0.2 \mu\text{J}$ |
| | Optical Output | Free Beam |
| Electrical Data | Electrical Power Consumption | < 90 W |
| | Line Voltage | 100 - 240 V AC (50-60 Hz) or 24 V DC |
| Interface | RS 232, USB | |
| Miscellaneous | Warm-up Time | < 10 min |
| | Operating Temperature | 18 - 38 °C |
| | Laser Head Size | 283 x 65 x 45 mm (core dimensions) |
| Options | Manual Shutter or Electrical Beam Blocker | |
| | External Telescope (e.g. M=5) | |
| | Stand Alone system (CDRH compliant; incl. key switch, heat sink, manual beam shutter) | |
| ¹⁾ Drift over 6 hours, energy averaged over 10 sec after 5 min of continuous operation, temperature variation < 3 °C/hour. ²⁾ RMS over 1000 pulses after 5 min of continuous operation. | | |

