

Stable and reliable IR high performances CW lasers



MAIN FEATURES

- LASER OPERATION
- OUTPUT POWER UP TO 20W
- SINGLE FREQUENCY OPERATION
- VERY LOW INTENSITY NOISE
- EXCELLENT BEAM QUALITY
- HIGH STABILITY OVER VIBRATION AND TEMPERATURE
- RELIABLE INDUSTRIAL GRADE COMPONENTS
- MAINTENANCE FREE

APPLICATIONS

- DIPOLAR TRAPPING
- OPTICAL TWEEZERS
- COHERENT LIDAR
- BIOTECHNOLOGY
- SCIENCES

EYLSA: Set it and forget it

With the new EYLSA platform stay focused on your research not on the laser.

The high performance design of the EYLSA 1064 lasers is based on high stability laser diodes which are amplified by fiber amplifier stages and isolated from back-reflections. The EYLSA's high performance design utilizes embedded air-cooling to provide exceptional high wall plug efficiency.

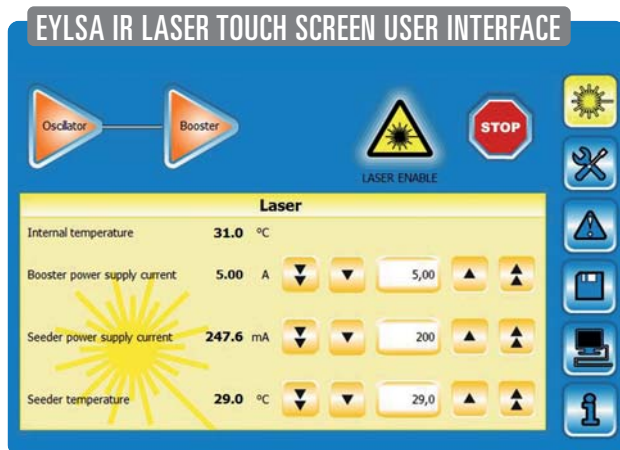
This robust architecture provides industry leading performance which is insensitive to both ambient temperature changes and environmental vibrations. The high reliability of EYLSA's integrated components ensures a long lifetime without any maintenance or preventive service (no realignment, no need to clean optics) and is guaranteed with a 1-year warranty.



EYLSA SPECIFICATIONS

| CHARACTERISTICS | UNITS | EYLSA-L-1064-10-P-SS-W-CO | EYLSA-L-1064-20-P-SS-W-CO |
|--|-----------------|---|---|
| OPTICAL CHARACTERISTICS | | LASER | |
| Wavelength | nm | 1064 +/- 2 | 1064 +/- 2 |
| Linewidth (1 ms integration) ¹ | kHz | ≤ 700 | ≤ 700 |
| Coarse tunability | GHz | NO | NO |
| Fine tunability | GHz | NO | NO |
| Average output power | W | 10 | 20 |
| Power stability (1 hour) | % | +/- 3 | +/- 3 |
| Intensity noise (RMS, DC to 1 MHz) | % | ≤ 0.1 | ≤ 0.1 |
| OSNR (0.01 nm resolution) | dB | ≥ 45 | ≥ 45 |
| Fundamental wavelength rejection | dB | / | / |
| Mid-stage access at fundamental wavelength | | NO | NO |
| Maximum mid-stage losses | dB | / | / |
| OUTPUT CHARACTERISTICS | | Collimated and isolated free-space output | |
| Output type | | Collimated and isolated free-space output | Collimated and isolated free-space output |
| Beam quality | M ² | ≤ 1.3 | ≤ 1.6 |
| Beam profile | | Quasi-Gaussian | Quasi-Gaussian |
| Beam diameter | mm | 5 +/- 1 | 5 +/- 1 |
| Pointing stability | μrad/C° | < 10 | < 10 |
| Polarization extinction ratio | dB | > 17 | > 17 |
| FACILITY REQUIREMENTS | | | |
| Supply voltage | VAC | 110 – 240 | 110 – 240 |
| Power consumption | W | ≤ 250 | ≤ 250 |
| Cooling | | Air cooled | Air cooled |
| Operating temperature | °C | 5 – 35 | 5 – 35 |
| External seeder dimensions | mm ³ | / | / |
| Laser box dimensions | mm ³ | 445 x 420 x 148 | 445 x 420 x 148 |
| Laser head dimensions | mm ³ | 250 x 42 x 42 | 250 x 42 x 42 |
| Fiber delivery length | m | 1 | 1 |

¹ Narrower linewidth available with external seeder



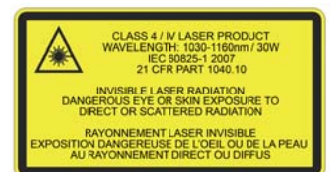
DIMENSIONS

EYLSA Platform

- A 420 mm [16.53"]
- B 445 mm [17.52"]
- C 148 mm [5.82"]



For more information:
www.quantel-laser.com



quantel@quantel-laser.com

Quantel - France
 2 bis, avenue du Pacifique
 Z.A. de Courtaboeuf - BP 23
 91941 Les Ulis Cedex - France
 Tel. +33 (0)1 69 29 17 00

Quantel - USA
 601 Haggerty Lane
 Bozeman, MT 59715 - USA
 Tel. +1 406 586 0131 / 1 877 QUANTEL

Quantel - GmbH
 Worringer Str. 30
 50668 Köln - Germany
 Tel. +49 (0) 221 / 677856750

