# EYLSA 532

ERBIUM YTTERBIUM LASER
FOR SCIENTIFIC APPLICATIONS

*Laser solutions by* **QUANTEL**

## Stable and reliable visible high performances CW lasers


### MAIN FEATURES

- LASER OPERATION
- OUTPUT POWER UP TO 1W
- SINGLE FREQUENCY OPERATION
- SINGLE MODE OUTPUT $M^2 < 1.2$
- WAVELENGTH LOCKING CAPABILITY
- HIGH STABILITY OVER VIBRATION AND TEMPERATURE
- RELIABLE INDUSTRIAL GRADE COMPONENTS
- MAINTENANCE FREE

### APPLICATIONS

- DIPOLAR TRAPPING
- FILTERED RAYLEIGH SCATTERING
- HOLOGRAPHY
- 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 532 lasers is based on high stability laser diodes and micro-cavity fiber laser which are amplified by fiber amplifier stages and then frequency doubled with single-pass periodically poled crystals. 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.

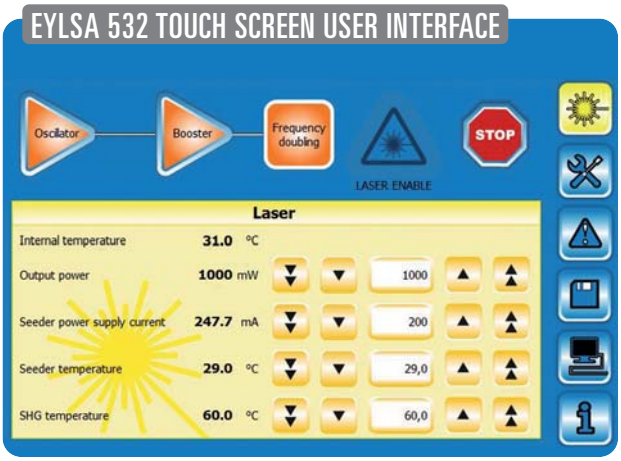
eylsa

## EYLSA SPECIFICATIONS

| CHARACTERISTICS | UNITS | EYLSA-L-532-1-P-SN-W-FS | EYLSA-L-532-1-P-UN-W-FS |
|---|---|---|---|
| **OPTICAL CHARACTERISTICS** | | LASER | SEEDER + AMPLIFIER |
| Wavelength | nm | 532 +/- 1 | 532 +/- 1 |
| Linewidth (1 ms integration)[1] | kHz | ≤ 2000 | ≤ 150 |
| Coarse tunability | GHz | NO | 250 |
| Fine tunability | GHz | NO | 10 (at 10 Hz) |
| Average output power | W | 1 | 1 |
| Power stability (1 hour) | % | +/- 1 | +/- 1 |
| Intensity noise (RMS, DC to 1 MHz) | % | ≤ 0.1 | ≤ 0.5 (from DC to 100 KHz) |
| OSNR (0.01 nm resolution) | dB | ≥ 60 | ≥ 60 |
| Fundamental wavelength rejection | dB | ≥ 40 | ≥ 40 |
| Mid-stage access at fundamental wavelength | | NO | NO |
| Maximum mid-stage losses | dB | / | / |
| **OUTPUT CHARACTERISTICS** | | | |
| Output type | | Free-space wavelength conversion module | Free-space wavelength conversion module |
| Beam quality | $M^2$ | ≤ 1.2 | ≤ 1.2 |
| Beam profile | | TEM00 | TEM00 |
| Beam diameter | mm | 0.28 +/- 0.05 | 0.28 +/- 0.05 |
| Pointing stability | µrad/C° | / | / |
| Polarization extinction ratio | dB | > 20 | > 20 |
| **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 | $mm^3$ | / | 449 x 383 x 104 |
| Laser box dimensions | $mm^3$ | 445 x 420 x 148 | 445 x 420 x 148 |
| Laser head dimensions | $mm^3$ | 133 x 50 x 30 | 133 x 50 x 30 |
| Fiber delivery length | m | 1 | 1 |

[1] Narrower linewidth available with external seeder

## EYLSA 532 TOUCH SCREEN USER INTERFACE




## DIMENSIONS

### EYLSA Platform

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


For more information:
www.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

quantel@quantel-laser.com