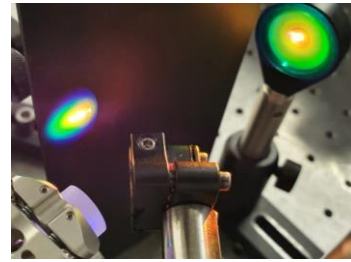
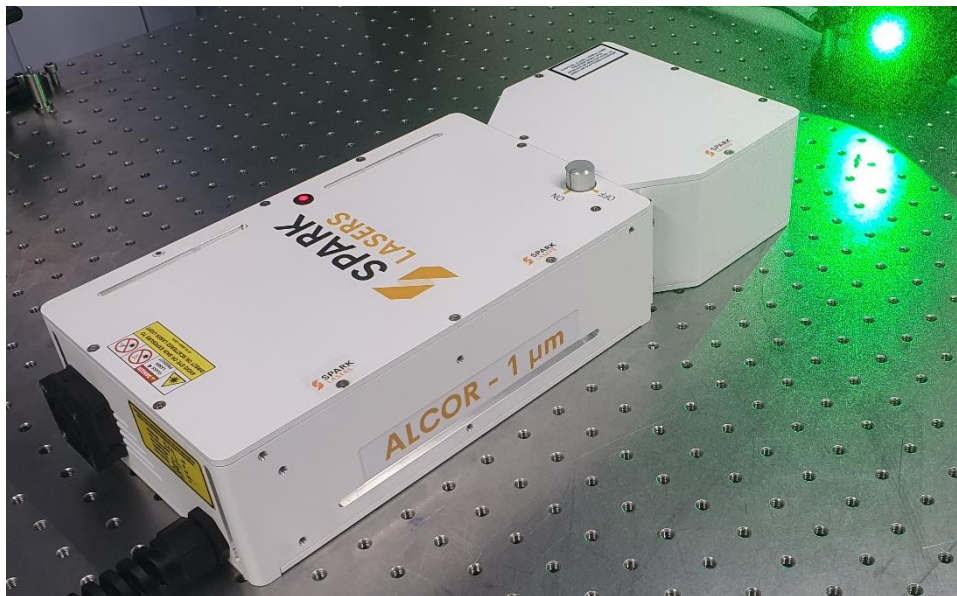
**Nanophotonics****Nonlinear Optics**

COMPACT GREEN FEMTOSECOND LASER

520 nm / 180 fs / Up to 2 W

Spark Lasers' ALCOR 520 is a new generation of high-power femtosecond laser emitting in the green. ALCOR 520 produces clean and stable pulses with a duration of 180 fs at a typical frequency of 80 MHz. ALCOR 520 is easy to install and use in a wide variety of environments thanks to its small size, high efficiency and high performance.

ALCOR 520 includes computer-controlled features such as fast power modulation or fine calibrated power adjustment. ALCOR's innovative fiber-based design offers high stability, high reliability without any maintenance making it the perfect industrial laser for scientific applications.

TECHNICAL SPECIFICATIONS*

| General | ALCOR 520-0.8 | ALCOR 520-2 |
|-------------------------------------|---|-------------|
| Wavelength | 520 nm | |
| Average power | 0.8 W | 2 W |
| Pulse duration (1) | 180 fs | |
| Group Delay Dispersion (2) | NA | |
| Repetition rate (3) | 80 +/- 1.5 MHz | |
| Energy per pulse (4) | 10 nJ | 25 nJ |
| Beam parameters | | |
| M ² (5) | < 1.2 | |
| Beam diameter (6) | 1.2 mm | |
| Divergence (7) | < 1 mrad | |
| Ellipticity (8) | > 0.9 | |
| Output beam | Collimated | |
| Polarization | > 500:1, vertical | |
| Stability | | |
| Long-term power stability RMS (9) | < 1% | |
| Short-term power stability RMS (10) | < 0.5% | |
| Electrical | | |
| Synchronization output | TTL | |
| External Interfaces | RS-232, USB, TCP/IP | |
| Software interfaces | GUI, RS-232 serial communication protocol | |
| Power consumption | < 100 W | |
| Cooling | Air | |
| Mechanical | | |
| Laser head dimensions | 421 x 165 x 89 mm | |
| Laser head weight | 7 kg | |
| Control unit | 19" / 3U height | |
| Control unit weight | 12 kg | |
| Umbilic length | 3 m | |
| Environmental | | |
| Operational temp range | 19-30°C | |
| Storage temp range | 0-40°C | |
| Operationnal max altitude | 2000 m | |
| Operational humidity | non condensing | |
| Storage humidity | 80 % RH | |

- (1) Sech² fit, autocorrelation measurement, +/- 20 fs
- (2) User adjustable group delay dispersion compensation
- (3) Other value upon request
- (4) Energy defined as the ratio between average power and repetition rate
- (5) M² measurement according to ISO method (4 sigma)
- (6) Beam diameter at output port @ 1/e²
- (7) Half divergence, far field measurement, ISO method
- (8) Minor over major diameter ratio, far field measurement
- (9) Over a 15 minute interval
- (10) Over an 8 hour interval @22°C +/-1°C

* This information is subject to modifications without prior notice.

