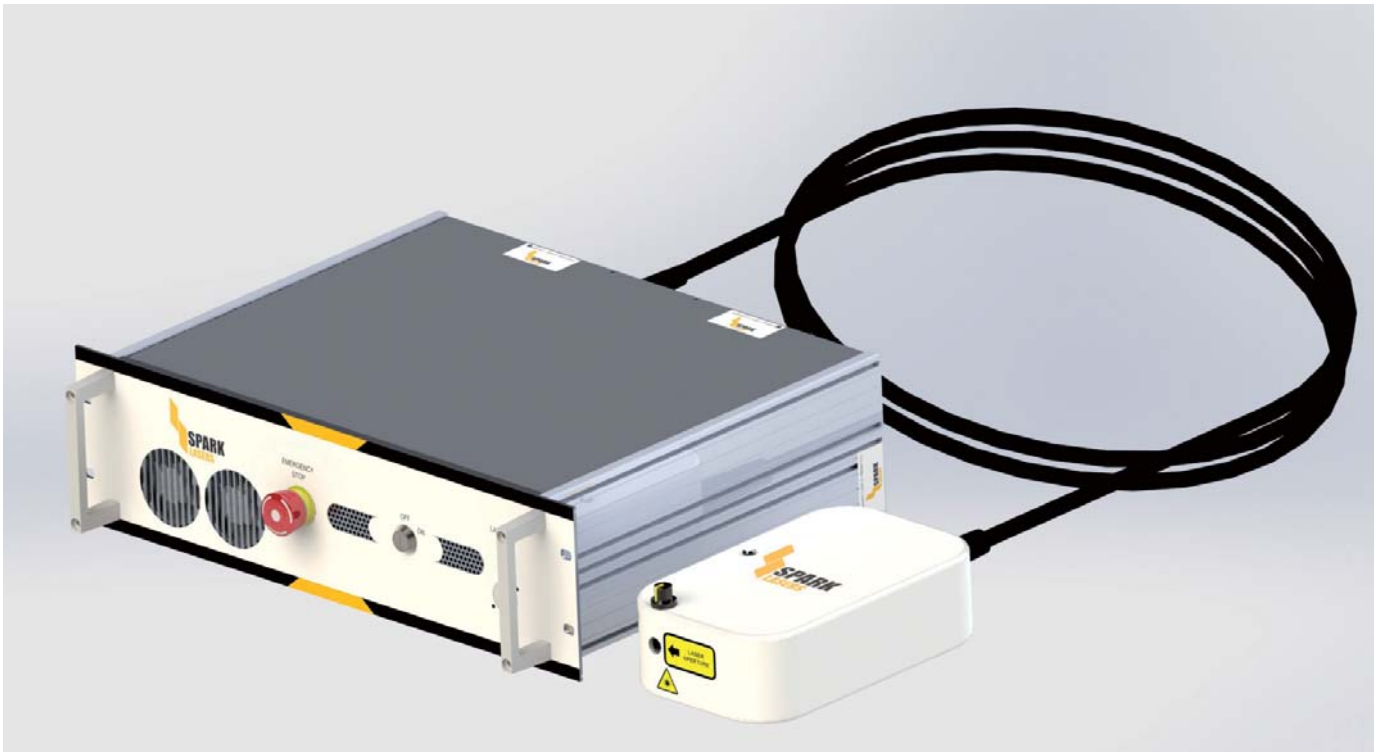


ALCOR SERIES



<170 FS PULSES / HIGH POWER / HIGH REPETITION RATE

ULTRA-COMPACT FEMTOSECOND LASER FOR BIOPHOTONICS

ALCOR produces high-average power with ultrashort femtosecond pulses (down to <170 fs) at high repetition rate (80 MHz standard, others optional) in an ultra-compact and robust format. ALCOR is a fiber laser with a best-in-class quality and collimated beam providing high-stability.

Integrating state of the art high-power full package amplifiers and pulse management, ALCOR offers remarkable pulse quality at high average power with no maintenance required.

CORE SPECIFICATIONS

- / High repetition rate : 80 MHz
- / High power : from 1 W to 2 W
- / < 170 fs (standard)

USABILITY

- / Ultracompact, robust & air cooled fiber laser
- / Plug'n play : < 5 min set up, sync. out / sync .in
- / Intuitive user interface
- / Additional wavelength in option

APPLICATIONS

- / Multiphoton microscopy / Two-photon microscopy
- / Neuroscience

CUSTOMER CARE

- / 24-month warranty
- / Worldwide technical support
- / Laser customization

TECHNICAL SPECIFICATIONS*

| | ALCOR IR-1 | ALCOR IR-2 |
|-------------------------|-------------------------------|------------|
| AVERAGE POWER | 1W | 2W |
| WAVELENGTH | 920 nm (OTHER OPTIONAL) | |
| PULSE DURATION | < 170 fs (OTHER OPTIONAL) | |
| REPETITION RATE | Fixed 80 MHz (OTHER OPTIONAL) | |
| M ² | < 1.2 | |
| BEAM WAIST DIAMETER | 1 mm | |
| BEAM POINTING STABILITY | < 25 μrad/°C | |
| ELLIPTICITY | > 0.9 | |
| WARM-UP TIME | < 5 min | |
| POWER STABILITY | < 1% RMS | |
| RMS NOISE | < 1% | |
| POLARIZATION | linear, > 100:1 | |

ELECTRICAL

| | | |
|---------------------|---|--|
| EXTERNAL INTERFACES | High speed external synchronisation (Synch. Out), communication through USB, RS 232, TCP/IP | |
| SOFTWARE INTERFACES | Intuitive GUI, Serial communication protocol | |
| POWER CONSUMPTION | 100 to 240 VAC, < 400 W | |

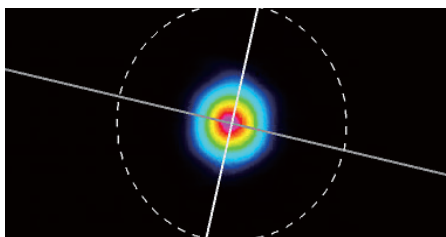
MECHANICAL

| | | |
|--------------------------------------|---|--|
| LASER HEAD DIMENSIONS & WEIGHT | 235 x 144 x 83.85 mm ³ – < 5 kg (with collimated beam) | |
| LASER CONTROLLER DIMENSIONS & WEIGHT | 19"/3U rack – 7,5 kg | |
| STANDARD UMBILICAL LENGTH | 3 m | |
| TECHNICAL DRAWINGS FOR DOWNLOAD | ALCOR | |
| COOLING | Air cooled | |

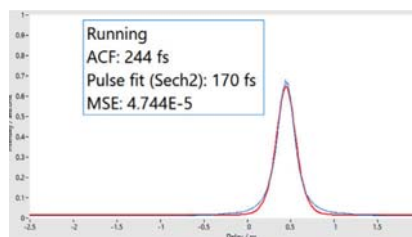
OPTIONS

| | | |
|-----------------------------------|--|--|
| GDD | Group Delay Dispersion pe-compensation (variable down to -30 000fs ²) | |
| CUSTOM PRIMARY WAVELENGTH | 915 to 930 nm | |
| ADDITIONAL WAVELENGTH | 1030 nm, 1040 nm, 1055 nm, 1064 nm | |
| CUSTOM PULSE REPETITION FREQUENCY | 40 MHz | |
| CUSTOM PULSE DURATION | < 120 fs | |
| F-SYNC | Fine-tuning PRF synchronization around a fixed central frequency. Can synchronize with any 3rd party master device. Electronic setting. | |

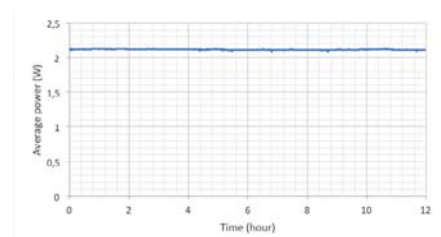
DIMENSIONS & PERFORMANCE



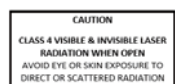
BEAM PROFILE



AUTOCORRELATION TRACE



AVERAGE POWER STABILITY



* This information is subject to modifications without prior notice.

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