ALCOR produces high-average power with ultrashort femtosecond pulses (down to 100 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.

**100 FS PULSES / HIGH POWER / HIGH REPETITION RATE**

**ULTRA-COMPACT FEMTOSECOND LASER FOR BIOPHOTONICS**

**CORE SPECIFICATIONS**
- High repetition rate : 80 MHz
- High power : from 1 W to 2 W
- 100 fs (standard)

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

**APPLICATIONS**
- Multiphoton microscopy / Two-photon microscopy
- Neuroscience

**CUSTOMER CARE**
- 24-month warranty
- Worldwide technical support
- Laser customization

Contact : +33 564 310 484 / info@spark-lasers.com
## TECHNICAL SPECIFICATIONS

### AVERAGE POWER

<table>
<thead>
<tr>
<th>Wave Length</th>
<th>1W</th>
<th>2W</th>
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<tr>
<td>1064 nm</td>
<td>1040 nm or other optional</td>
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</table>

### PULSE DURATION

100 fs (other optional) with standard GDD precompensation from 0 down to -30 000 fs²

### REPEITION RATE

Fixed 80 MHz (other optional)

### M²

< 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 (Sync. 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**
252 x 151 x 91 mm³ – < 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 -50 000 fs²)

**ADDITIONAL WAVELENGTH**
915 to 930 nm

**CUSTOM PULSE REPETITION FREQUENCY**
40 MHz

**CUSTOM PULSE DURATION**
Any other pulse duration available upon request

### DIMENSIONS & PERFORMANCE

- **BEAM PROFILE**
- **AUTOCORRELATION TRACE**
- **AVERAGE POWER STABILITY**

*This information is subject to modifications without prior notice.*

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www.spark-lasers.com