

ALCOR 920 nm SERIES



100 FS PULSES / HIGH POWER / HIGH REPETITION RATE

ULTRA-COMPACT FEMTOSECOND LASER FOR BIOPHOTONICS

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 fullt 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
- / 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

TECHNICAL SPECIFICATIONS*

ALCOR 920

AVERAGE POWER	1W	2W
WAVELENGTH	920 nm (OTHER OPTIONAL)	
PULSE DURATION	100 fs (OTHER OPTIONAL) with standard GDD precompensation from 0 down to - 30 000 fs ²	
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 (Sync. Out), communication through USB, RS 232, TCP/IP with remote control for fast intervention
SOFTWARE INTERFACES	Intuitive GUI, Serial communication protocol
POWER CONSUMPTION	100 to 240 VAC, < 400 W

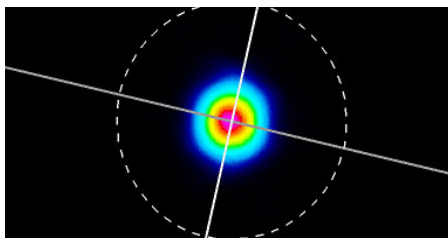
MECHANICAL

LASER HEAD DIMENSIONS & WEIGHT	252 x 151 x 91 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

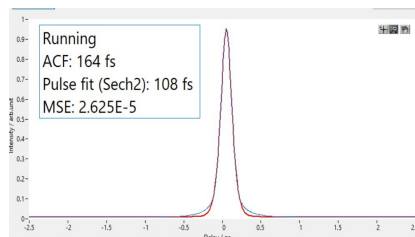
OPTIONS

GDD	Group Delay Dispersion pe-compensation (variable down to -50 000fs ²)
CUSTOM PRIMARY WAVELENGTH	915 to 930 nm
ADDITIONAL WAVELENGTH	1040 nm, or 1064 nm
CUSTOM PULSE REPETITION FREQUENCY	40 MHz
CUSTOM PULSE DURATION	Any other pulse duration available upon request

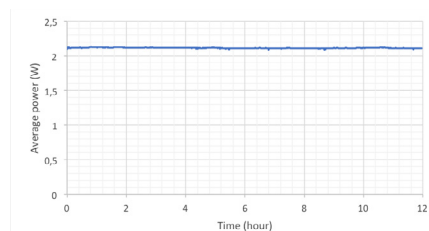
DIMENSIONS & PERFORMANCE



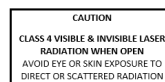
BEAM PROFILE



AUTOCORRELATION TRACE



AVERAGE POWER STABILITY



* This information is subject to modifications without prior notice.

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