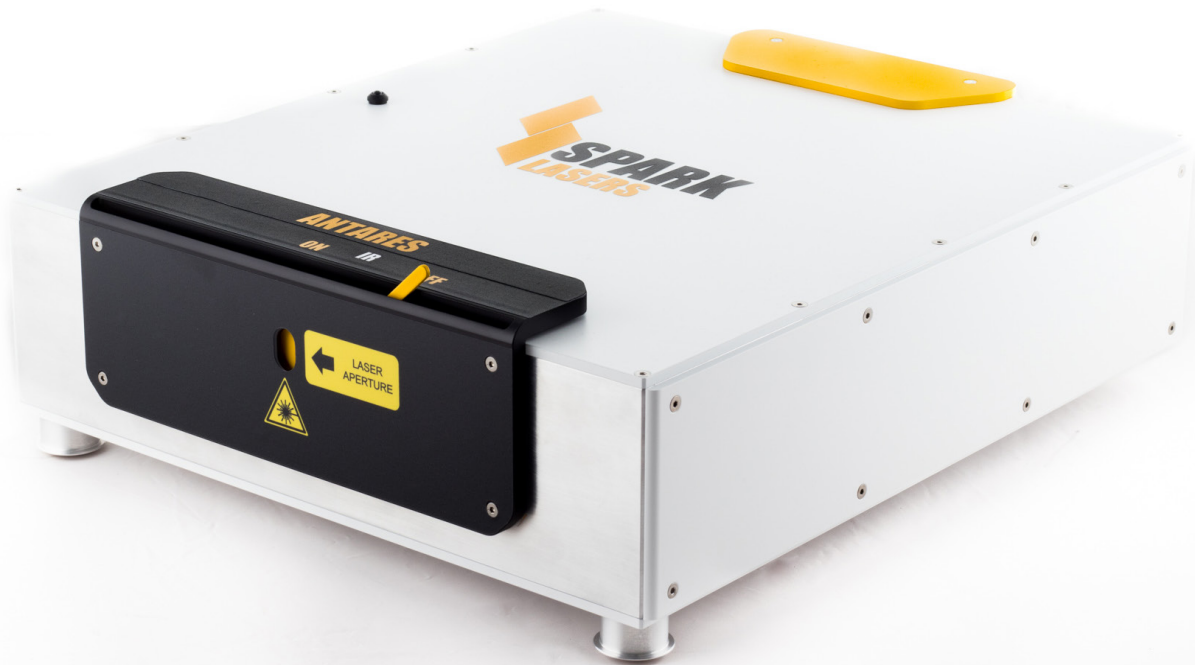


# ANTARES SERIES



<10 ps / UP TO 40W / QCW / NARROW LINEWIDTH

## COMPACT PICOSECOND FIBER LASER FOR SPECTROSCOPY & NONLINEAR OPTICS

ANTARES is a picosecond, quasi-continuous wave laser with a standard high repetition rate up to 80 MHz, integrating state of the art, high-power, fully packaged fiber amplifiers, ANTARES offers remarkable pulse quality at high average power with no maintenance required, in an ultra compact and robust format.

ANTARES is ideally suited for applications such CARs and spectroscopy application.

SPARK LASERS has especially designed ANTARES to answer demanding spectroscopy applications for instrumentation and industrial OEM integration working with 24/7 operations, in an ultra-compact and robust format. ANTARES series offers remarkable pulse quality optionally including very narrow linewidth (down to 0.01 nm) especially for CARs. ANTARES is air-cooled and designed with utmost accuracies allowing eased and simplified use (plug n' play with on-the-fly parameters).

ANTARES is the perfect fit for spectroscopy applications offering the ultimate technologies allowing to benefit from superior and unequalled performances with average powers from 1W up to 40W at 1030 nm or 1064 nm (upon request), with > 500 nJ of energy per pulse.

ANTARES can be doubled or tripled in the harmonics to answer even the most challenging industrial and scientific applications.

Optionally, ANTARES can embed a wide GDD precompensation and integrated electronics for fine and fast power modulation through GUI or TTL signal with gating and even pulse picking to cover multiple applications.

# TECHNICAL SPECIFICATIONS\*

	ANTARES IR-1	ANTARES IR-5	ANTARES IR-20	ANTARES IR-40
AVERAGE POWER	1W	5W	20W	40W
WAVELENGTH	1030 nm or 1064 nm (OTHER OPTIONAL)			
SPECTRAL WIDTH	> 2,5 nm (NARROWER OPTIONAL)			
PULSE DURATION	< 10 ps			
REPETITION RATE	80 MHz (OTHER OPTIONAL)			
M <sup>2</sup>	< 1.2			
BEAM WAIST DIAMETER	1 mm			
BEAM POINTING STABILITY	< 25 µrad/°C			
ELLIPTICITY	> 0.9			
WARM-UP TIME	< 5 min			
POWER OUTPUT	FREE SPACE			
POWER STABILITY & RMS NOISE	< 1% RMS		< 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 including remote control			
POWER CONSUMPTION	100 to 240 VAC, < 200 W			

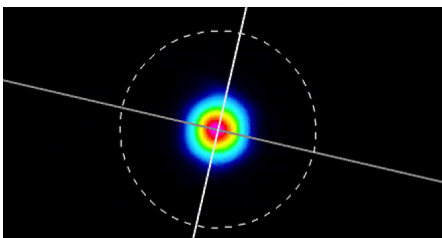
## MECHANICAL

LASER HEAD DIMENSIONS & WEIGHT	397 x 339 x 131 mm <sup>3</sup> – 13 kg			
LASER CONTROLLER DIMENSIONS & WEIGHT	19"/3U rack – 7,5 kg			
STANDARD UMBILICAL LENGTH	3 m			
TECHNICAL DRAWINGS FOR DOWNLOAD	<a href="#">ANTARES IR</a> / <a href="#">ANTARES DUAL OUTPUT</a>			
COOLING	Air cooled			

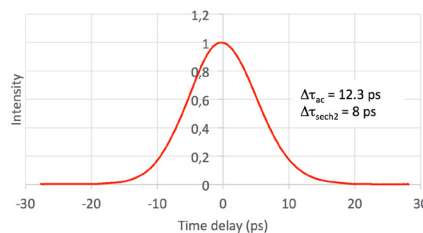
## OPTIONS

F-SYNC	Fine-tuning PRF synchronization +/- 1 Mhz around a fixed central frequency. Can synchronize with any 3rd party master device. Electronic setting.			
ULTRA NARROW SPECTRAL LINEWIDTH	Anywhere below < 2.5 nm			
ADDITIONAL WAVELENGTH	515 nm or 532 nm, 343 nm or 355 nm			
CUSTOM PULSE REPETITION FREQUENCY	40 MHz, 20 MHz			
POWER MODULATION	From 0 to 100 % through GUI or TTL signal including gating			
PULSE PICKING	Available with 40 MHz seeder allowing to pulse pick 1/n to decrease frequency			

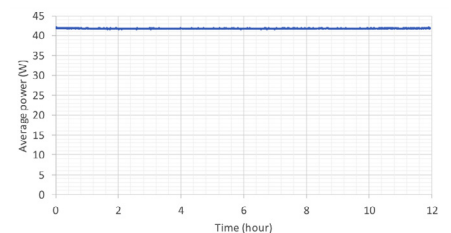
## PERFORMANCE



BEAM PROFILE



AUTOCORRELATION TRACE



AVERAGE POWER STABILITY

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

