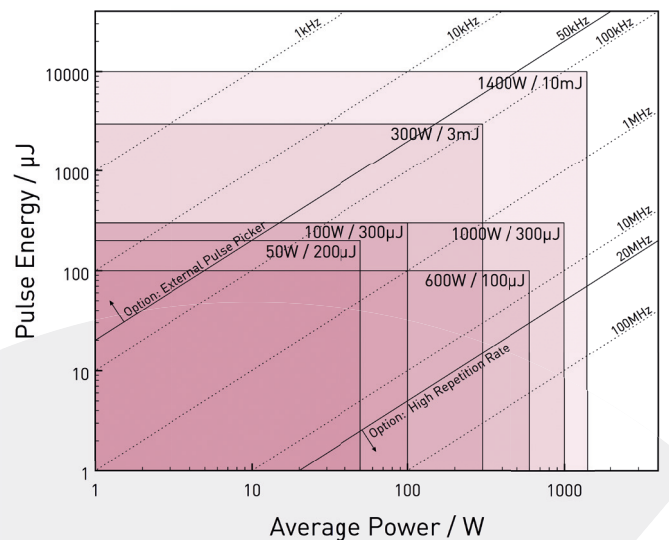


CUSTOMIZED kW- AND mJ-CLASS FEMTOSECOND LASER SYSTEMS



AFS customized kW- and mJ-class ultrafast laser systems are based on AFS leading-edge fiber technology. They unite multiple main-amplifier channels using coherent combination, a technology which AFS has matured to an industrial grade. Thus, the generated laser parameters are, for the first time, not limited by physical (optical) constraints of the laser architecture. Building on the exceptional performance of AFS fiber lasers, an extreme reliability, remarkable long-term stability, compact system design and high wall-plug efficiency can be guaranteed.



Overview of available laser parameters



CUSTOMIZED kW- AND mJ-CLASS FEMTOSECOND LASER SYSTEMS

	HIGH REPETITION RATE	HIGH PULSE ENERGY
Central wavelength	1030 nm	
Repetition rate	50 kHz ... 100 MHz	10 kHz ... 20 MHz
Pulse energy	up to 300 μ J	up to 10 mJ
Peak power	up to 1 GW	up to 30 GW
Average power	up to 1 kW	up to 1.5 kW
Pulse duration	<300 fs ... 10 ps adjustable	
Polarization	linear	
Beam quality	Close to diffraction-limited, $M^2 < 1.3$	
Average-power stability	<0.5% RMS	
Pulse-energy stability	<0.5% RMS	
Beam-pointing stability	<5 μ rad RMS (<5% of nat. divergence)	
Additional features	Turnkey (no manual adjustment necessary), completely software-controlled, temperature-stabilized dust-sealed housings	
Options	OPA, SHG, THG, HHG, NC, BURST, FASTSWITCH	

