

Origami – 10 HP



High power air-cooled 1- μ m soliton femtosecond laser for OEM and R&D applications

- Excellent pulse quality – pedestal-free transform-limited soliton pulses
- Clean sech²-shaped optical spectrum
- No Kelly-sidebands – no spectral ripple
- Diffraction-limited beam quality
- Low amplitude and phase noise
- No amplifier built in – no ASE noise
- High repeatability and 24/7 operation
- Compact, dust-sealed OEM package
- Plug & play
- Air cooled – no water cooling
- Low power consumption
- Remote control
- One-button operation – no adjustment knobs or screws
- Maintenance free – no user-serviceable parts inside or outside laser



	Origami – 05 HP	Origami – 10 HP
Center wavelength	514 – 520 nm	1028 – 1040 nm
Pulse duration	< 200 fs	< 200 fs
Average output power	> 400 mW	> 1 W
Pulse repetition rate	40 – 200 MHz	
Pulse energy (up to)	10 nJ	25 nJ
Peak power (up to)	> 40 kW	> 100 kW
Spectral bandwidth	< 3 nm	< 6 nm
Output	collimated free space, $M^2 < 1.2$	
PER	> 20 dB	
Amplitude noise	< 0.5% rms, < 1% pk-pk (1h)	
Center wavelength drift	< 0.1 nm pk-pk (1h)	
Warm-up time	< 30 minutes	
Specs guaranteed	18 °C – 28 °C	
Storage temperature	-15 °C – 65 °C	
On/Off cycles	> 10 ⁴ 000	
Size laser head	305 x 212 x 67 mm ³	
Size controller	447 x 281 x 134 mm ³ (19" rack mount)	
Power consumption	< 150 W	
Power supply	90 – 264 VAC, 47 – 63 Hz	
Weight laser head	5 kg	
Weight controller	7 kg	

Options

- Synchronization to external clock for ultra-low timing jitter
- Electrical interface for pump power control
- Piezo controlled cavity length
- Repetition rate tunability
- Wavelength tunability
- Internal monitor PD
- Optical isolator

On request

- Other pulse repetition rates
- UV generation

Sample data Origami – 10 HP

