

**NEW**

SWISS MADE

Origami XP2 is a high energy and high power femtosecond system based on a simple and compact chirped pulse amplification architecture capable of delivering **> 500  $\mu\text{J}$**  pulse energy, **80 W** average power with pulse duration below **800 fs**. It is based on the unique, ultra-stable and low noise Origami femtosecond seed laser. Origami XP2 has been specifically designed for all applications requiring high energy, sub-picosecond pulse duration at a cost-competitive price. The compact all-in-one laser is water cooled and is delivered with full remote control capabilities.

**NEW 80W  
HIGH ENERGY  
FEMTOSECOND  
LASER**

**OPTIONS:**

- + Green 515 nm
- + UVA 343 nm
- + Synchronization to external clock

**MAIN APPLICATIONS:**

- + Material processing
- + Glass and sapphire cutting
- + Plasma generation
- + Nonlinear optics

**OUTSTANDING FEATURES :**

- + Pulse energy up to 500  $\mu\text{J}$
- + High pulse quality
- + Narrow spectral width
- + Excellent energy and pointing stability
- + Maintenance free – no alignment required
- + Complete remote control
- + 4/7 operation



**ORIGAMI - 10 XP2**

CENTER WAVELENGTH	1030 nm
PULSE DURATION	<800 fs
AVG. OUTPUT POWER [UP TO]	>80 W
PULSE ENERGY [UP TO]	>500 µJ
PEAK POWER [UP TO]	500 MW
PULSE REPETITION RATE	single shot – 1 MHz
SPECTRAL BANDWIDTH	< 2 nm
BEAM QUALITY	$M^2 < 1.4$ , TEM <sub>00</sub>
ELLIPTICITY	< 1.15
AMPLITUDE NOISE [12 h]	< 1.6 % rms
PER	> 23 dB vertical
ENERGY CONTRAST	23 dB
POINTING STABILITY	< 100 µrad rms (12 h) const. temp., < 5 µrad/ °C 18-35°C
LASER OUTPUT	collimated free space
<b>ENVIRONMENTAL</b>	
WARM-UP TIME	< 15 minutes
OPERATION TEMPERATURE	18 °C – 32 °C
STORAGE TEMPERATURE	- 20 °C – 65 °C
ON/OFF CYCLES	> 10000
<b>MECHANICAL</b>	
SIZE LASER SYSTEM	560 x 498 x 180 mm <sup>3</sup>
WEIGHT LASER SYSTEM	70 kg
<b>ELECTRICAL</b>	
POWER SUPPLY	24 VDC/25 A + 48 VDC/21 A or 90 – 264 VAC, 47 – 63 Hz
POWER CONSUMPTION	1600 W
<b>COOLING</b>	
LASER SYSTEM	water cooled

