

## YACTO-FL Series High Power Femtosecond Laser



YACTO-FL series compact laser can output high power femtosecond pulse with average power up to 50 W and single pulse energy up to 100 uJ at 1030 nm. Pulse width can be remotely tuned from 400 fs to 5 ps with GUI interface. The output pulse frequency can be adjusted from single-shot to 2MHz, and controlled by external Trigger and Gate signal. All-fiber oscillator and amplifier chain offers perfect beam quality and highly stable output power (<1% RMS).

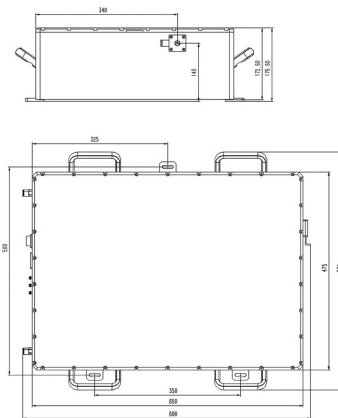
### Application

- Thin film cutting or etching
- Two-photon microscope
- Glass cutting and drilling / Polymerization and welding
- Semiconductor / Sapphire dring and scribing
- Ultrafast spectroscopy

### Features

- All PM-fiber chain, compact design
- Tunable pulse width: 400 fs to 5 ps
- Max single pulse energy: 100 uJ
- Max average power: 50 W
- Tunable repetition rate: single shot-2 MHz
- Pulse picker included for pulse-on-demand output
- Industrial grade optomechanical design
- Burst pulse output

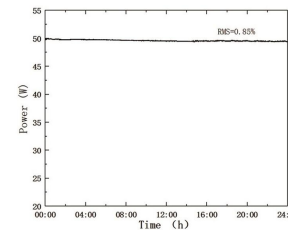
High stand industrial grade optomechanical design and "None kinematic mirror mount" solution guarantees a long-term stability. Optional second harmonic generator can be integrated and output 515 nm laser.



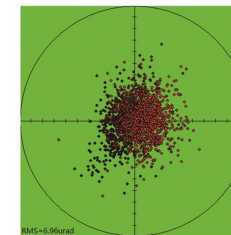
▲ Mechanical drawings

### 规格

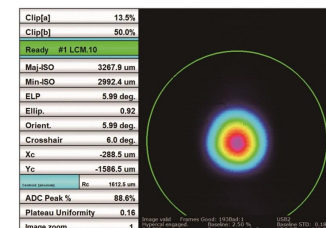
型号 Model	YACTO-FL-10	YACTO-FL-50
Wavelength	1030±5nm	
Average Power	> 10W (optional 20W)	> 50W
Pulse Energy	> 20uJ (optional 40uJ)	> 100uJ
Pulse Width	< 400fs to 5ps	
Repetition Rate	Single shot -2MHz	
Beam Ellipticity	> 0.85	
Beam Quality	M <sup>2</sup> < 1.3 (Typical < 1.2)	
Beam Divergence	< 1mRad	
Power Stability	< 1% rms over 8 hours	
Dimensions	650 x 475 x 176mm	
Power-box Size	3.5U x 500mm	
Control Link	RS232	
Pod/Gate Link	SMA TTL	
Operation Condition	Temperature: 15-35°C Humidity: < 60%	
Cooling Type	Water Cooling	



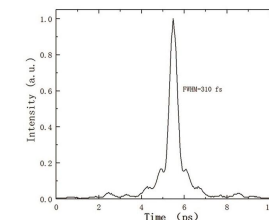
◀ 24-hour power stability test



◀ beam pointing test



▲ Beam profile



▲ Pulse width measurement