

## **MOPA pulsed fiber laser (water cooled) 300W/500W/1000W**

### **一、 Product introduction:**

High power MOPA pulsed fiber laser is a high-power fiber laser using directly electrically modulated semiconductor laser as seed source (MOPA). It has perfect laser characteristics and good pulse shape control ability. Compact structure, convenient operation, maintenance free as a whole, and can be directly integrated into user equipment. The pulse frequency and pulse width are independently controllable. Through the adjustment and matching of two laser parameters, it can achieve constant peak power output and be applicable to a wider range of marking substrates. The output power of up to 300 / 500 / 1000W makes it particularly advantageous in thin metal cutting, laser cleaning and other applications.

### **二、 Product features**

1. The working pulse width is independently adjustable, and the adjustable range is large: 10-500ns
2. Working frequency is independently adjustable, high repetition frequency: 5-10000khz
3. Support the frequency conversion function in the light out state
4. Single pulse energy > 1.5mj, support single pulse energy customization
5. Excellent output beam quality, support customization
6. Both pulse and CW laser output modes
7. Stable output in high temperature and low temperature environment, high stability and reliability

### **三、 Product application**

1. Laser cleaning
2. Polar ear cutting
3. Metal deep carving and flight marking
4. Sheet metal welding and cutting
5. Ceramic Scribing and resistance fine adjustment
6. Stripping anode and coating
7. Scribing processing of photovoltaic single crystal / polycrystalline silicon wafer
8. Continuous processing of high reverse materials, etc

### **四、 Product parameters**

Product model	Unit	YNFL-300-1.5	YNFL-500-1.5	YNFL-1000-1.5
Central wavelength	nm	1064		
Average power	W	300	500	1000
Pulse width	ns	10-500		
Frequency range	KHz	5-10000		
Maximum pulse energy	mJ	1.5		
Beam quality	-	<1.6	<2	<2.5
Spot roundness	%	>90		
Spot diameter	mm	6-10 (Customizable)		
Power stability	%	<5		
Polarization direction	-	Random		
Armored cable diameter	mm	10		
Length of armor cable	m	5 (Customizable)		
Working voltage	V	48DC	48DC	220VAC
Working current	A	<22	<35	<16A
Working temperature	°C	-5-35		
Storage temperature	°C	-10-60		
Refrigeration mode	-	Water cooling		
Overall size	mm	397×439×88		439.5×500×148