

AOFemto Jericho Series

Industrial IR femtosecond laser

- < Pulse width < 800 fs
- < Beam roundness up to 95%
- < Maximum output power up to 50W
- < Both edge trigger and level trigger are available
- < SYNC output function available
- < Excellent pulse stability (<2%)

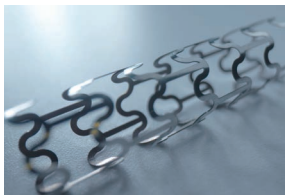


► Features & Benefits:

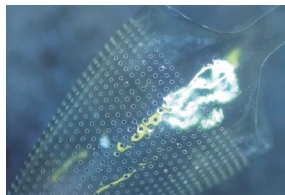
AOFemto Jericho femtosecond IR lasers feature excellent beam quality ($M^2 < 1.2$) with a beam roundness up to 95%. The pulse stability and power stability of the laser are excellent. The output power of the laser is in the range from 10W to 50W.

The lasers can be controlled via external gate/trigger signals. Both high/low level gate and rising/-falling edge trigger are available. The rising/falling edge trigger mode enables Pulse-on-demand (POD) functionality. In addition, the output power of the laser can be controlled through external analog voltage signal.

With a pulse width of <800fs, there is almost no heat damage during processing. The AOFemto Jericho femtosecond IR lasers are suitable for high-precision laser micro-machining applications, including medical device manufacturing, Nitinol metal cutting, polymer material cutting, drilling, and so on.



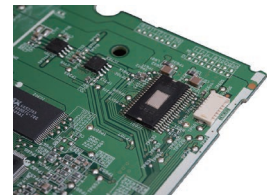
Medical device manufacturing



Balloon hole drilling



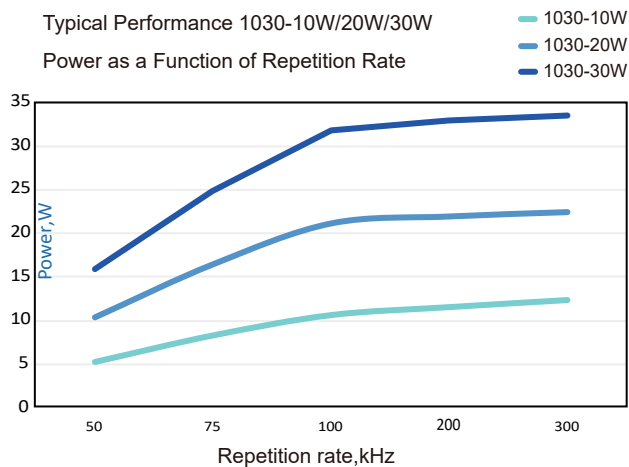
High-accuracy/High-speed/
Micro-machining



Semiconductor/Solar processing/
Wafer scribing

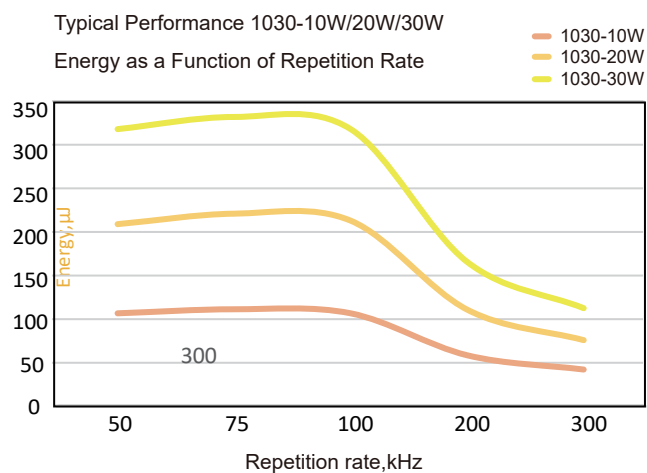
Typical Performance 1030-10W/20W/30W

Power as a Function of Repetition Rate



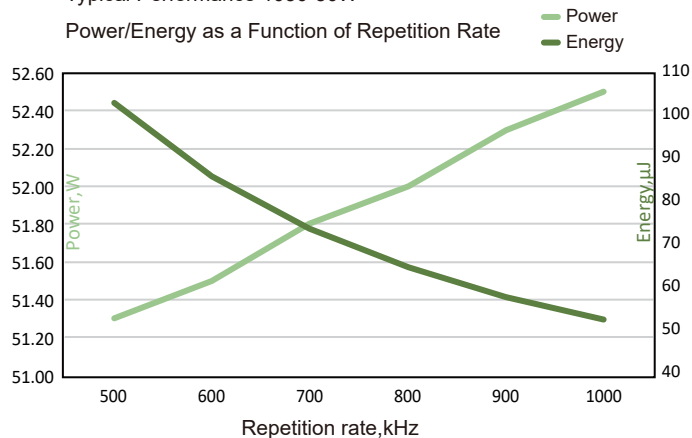
Typical Performance 1030-10W/20W/30W

Energy as a Function of Repetition Rate



Typical Performance 1030-50W

Power/Energy as a Function of Repetition Rate



AOFEMTO 1030

Specification	10W-100K	20W-100K	30W-100K	50W-500K
Wavelength (nm)	1030			
Average Power (Watts)	> 10W@100KHz	> 20W@100KHz	> 30W@100KHz	> 50@500KHz
Energy (μJ)	> 100	> 200	> 300	> 100
Specified Repetition Rate(kHz)	100			500
Repetition Rate (kHz)	50-500			500-1000
Pulse Width (fs)	< 800			
Beam Quality (M ²)	< 1.2			
Beam Roundness (%)	> 90			
Beam Diameter (mm)	< 2			
Beam Divergence (mRad)	< 2			
Point Stability (μrad/°C)	< 50			
Polarization Ratio	100:1 Linear,Horizontal			
Pulse-to-Pulse Stability (% RMS)	< 2% RMS over 10hours			
Average Power Stability(% over12 hours)	< 3			
Cold Start Warm-Up (mins.)	< 45			
Standby Warm-Up (mins.)	< 15			
Operational Temperature Range (°C)	15 to 35			
Operation Humidity Range (%)	20 to 80,Non-condensing			
Storage Temperature Range (°C)	- 20 to 50			
Storage Humidity Range (%)	20 to 80,Non-condensing			
Input Voltage (VDC)/Rated Power(W)	24 / 1000			
Communication	RS232			
Cooling	Water			

