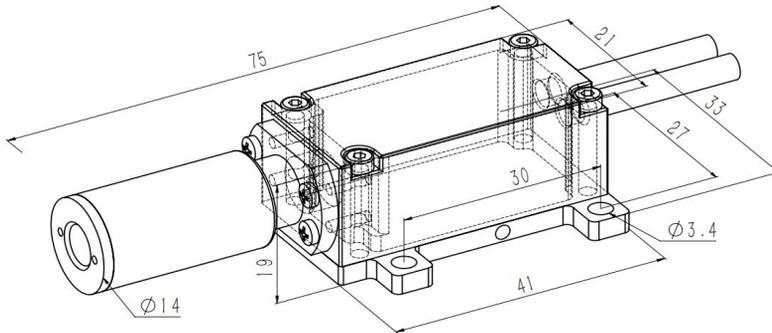


IR1030D2000-75x33x19-2-00

Application

**Special Designed for
Laser Engraving**

Dimensions (Unit: mm)



Specifications

Model Number		IR1030D2000- 75x33x19-2-00		
Mechanical Specifications		<i>Min</i>	<i>Typ</i>	<i>Max</i>
Laser head	Width x Height (mm)	-	33x19	-
	Length (mm)	-	75	-
	Weight (g)	-	-	50
Housing Material		Aluminum		
Optical Specificaitons		<i>Min</i>	<i>Typ</i>	<i>Max</i>
Wavelength (nm)		1029	1030	1031
Output Power (mW)		2	2.3	2.6
RMS Power Stability (25°C, 8h)		-	0.5	1%
Output Power Mode		Pulse		
Laser Class		4		

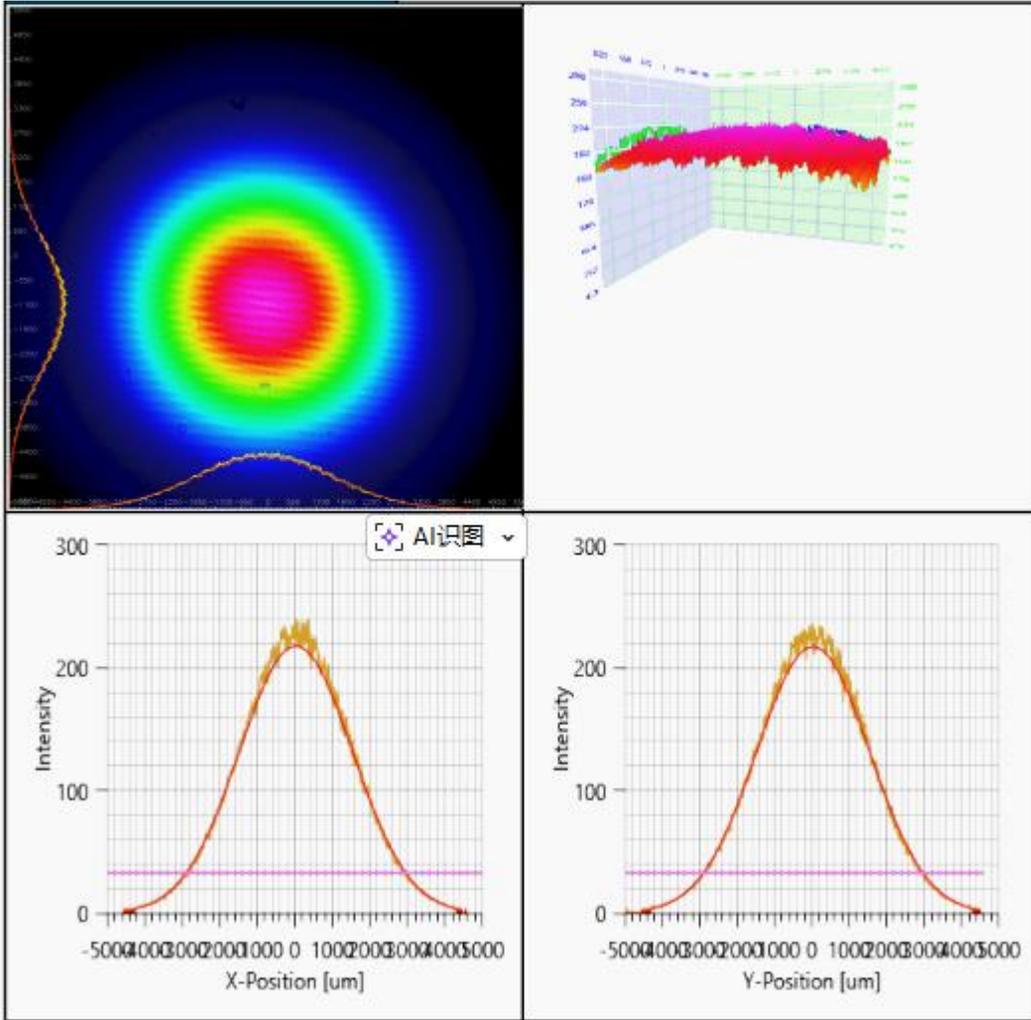
Frequency(kHz)	18	20	22
Pulse Width(ns)	5	6	7
Beam Specifications	Min	Typ	Max
Beam Divergence (mrad) ⁽¹⁾	-	5	7.5
Beam Diameter at 1m (mm) ⁽¹⁾	-	5	6
Beam Roundness	70%	-	100%
Beam Mode Longitude	Multi		
Beam Mode Transverse ⁽²⁾	TEM ₀₀		
Electrical Specifications	Min	Typ	Max
Power Type	Q-switch		
LD Voltage		1.7	2
LD Operating Current (A) at 1.7V		10	11
Threshold Current(A)	3	3.5	4
Wire Length (mm)	90	100	110
Wire Type		OD3.3	
Housing Isolation		No	
Reverse Voltage Protection		No	
ESD protection		No	
Reliability	Min	Typ	Max
Operating Temperature (°C) ⁽³⁾	25	30	35
Rise Time (ns)	-	4	5
Storage Temperature (°C)	-20	-	70
Environmental Humidity (RH, %)	10	-	90
Lifetime (h) (MTTF at 25°C)	5,000	-	10000

⁽¹⁾ Full angle (1/e²)

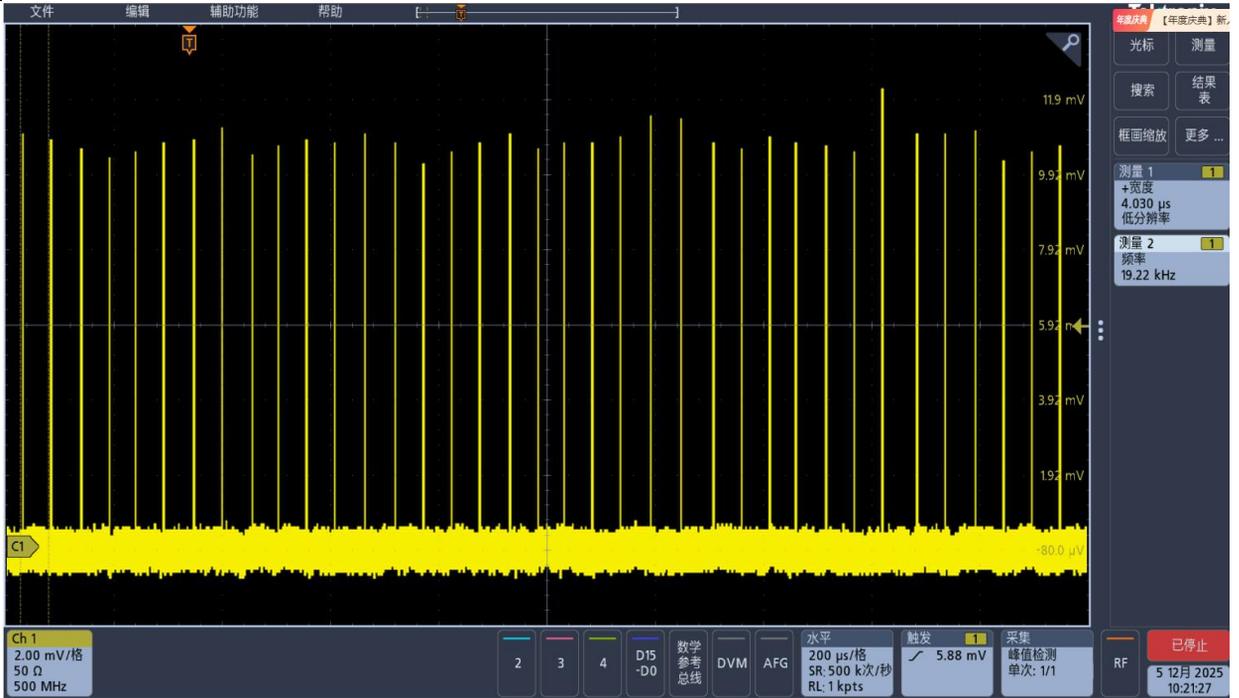
⁽²⁾ See pic.1 in page 3.

⁽³⁾ Base plate temperature, no TEC. Active cooling is required.

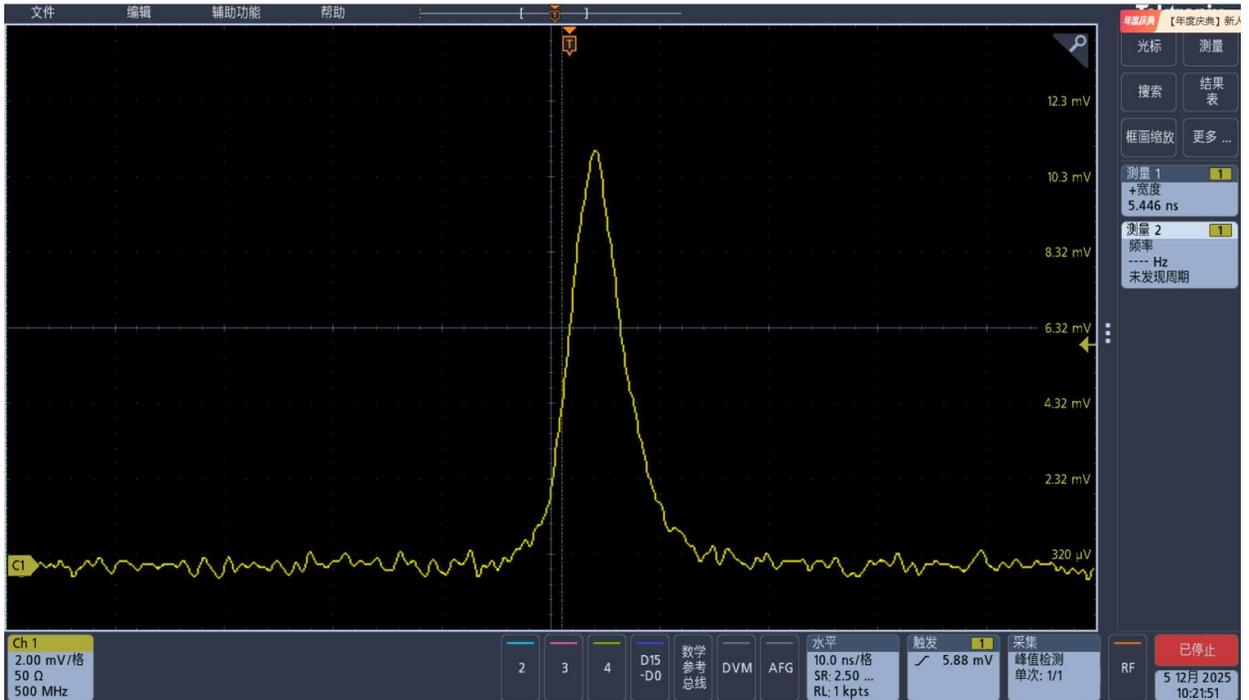
Picture 1: Beam Spot Example



Picture 2: Frequency Example (19.22kHz)



Picture 3: Pulse Width(ns) Example (5.5ns)



Picture 4: (Example)

Long-Term Power Stability (%) (RMS 60 hours) 0.72%
Long-Term Power Stability (%) (RMS 8 hours) 0.54%

