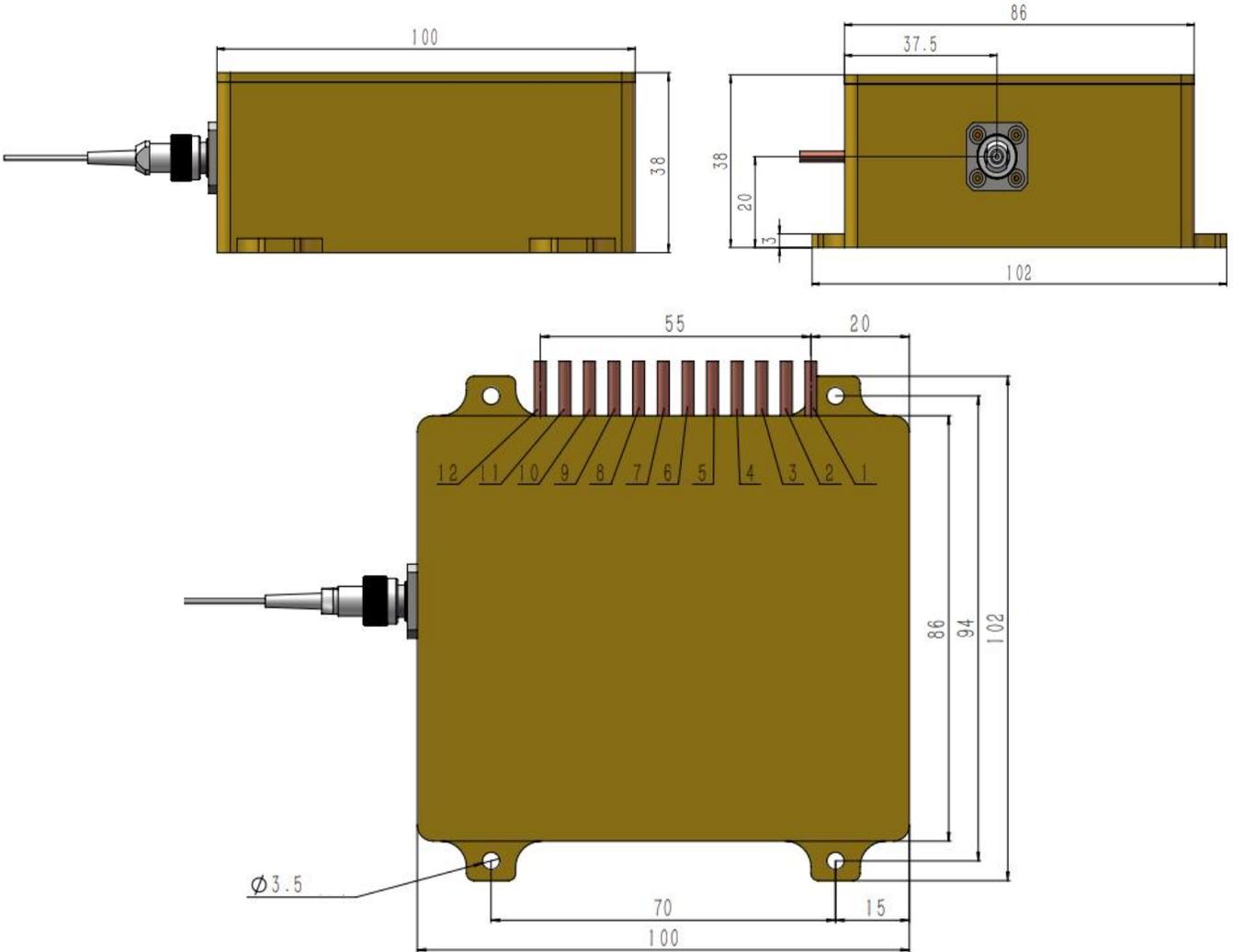


Y577D500-100x102x38-50FC

- Features**
- DPSS Laser
 - 50µm Fiber Coupled
 - High Stability
 - Yellow Laser

Dimensions (Unit: mm)



- 1: Laser + 2: Laser - 3: PD + 4: PD - 5: NTC 6: NTC
 7: TEC + 8: TEC - 9: Aiming beam + 10: Aiming beam -

Specifications				
Model Number		Y577D500-100x102x38-50FC		
Mechanical Specifications		Min	Typ	Max
Laser Head	Width x Height (mm)	-	102x38	-
	Length (mm)	-	-	100
	Weight (g)	-	-	1500
Housing Material		Brass with gold plating		
Optical Specifications		Min	Typ	Max
Wavelength (nm)		574	577	580
Continuous Output Power (mW)		500	700	-
Power Stability ⁽¹⁾		-	1%	3%
Output Power Mode		CW		
Laser Class		4		
Aiming Beam Optical Power (mW)		1	-	5
Aiming Beam Optical Wavelength (nm)		630	-	660
Fiber Specifications		Min	Typ	Max
Fiber ⁽²⁾	Core Diameter(μm)	-	50	-
	NA	-	0.12	-
	Length(m)	-	1.5	-
	Connector to laser	FC/PC		
	Connector	SMA905		
Electrical Specifications		Min	Typ	Max
Power Type		ACC		
577 LD Voltage (DC, V)		1.8	2	2.5
577 LD Operating Current (A) at 2V			10	12
Aiming Beam Voltage (DC, V)		1.8	2	2.5
Aiming Beam Operating Current (mA) at 2V			100	200
TEC Operating Voltage(V)		-	-	12
TEC Operating Current (A)		-	-	8
PD Monitor Current (mA)		-	-	200
Thermistor Constants		A = 2.231e ⁻³ B = 4.694e ⁻⁵ C = 0.884e ⁻⁶		
Thermistor Resistance		see remarks in page 3		
Power Consumption (W)			20	30
Housing Isolation &ESD Protection		No		

Reliability	Min	Typ	Max
Operating Case Temperature Range (°C) ⁽³⁾	T-1	T	T+1
Warm-up Time (mins)	-	3	5
Storage Temperature (°C)	0	-	40
Environmental Humidity (RH, %)	5	-	85
Lifetime (hours) (MTTF at 25°C)	10,000	-	-
RoHS Compliance Declaration	Yes		
Remarks			
<ul style="list-style-type: none"> • Product ID for placing orders: Y577D500-100x102x38-50FC • With TEC inside • Datasheet Version: 1 • No PCB & No Power Supply • Customer is responsible for suitable heat sinking. • Example of beam spot (see picture2) • Examples of laser output in pulsed mode (see picture 1) • Thermistor Resistance: <p>6.6KΩ@35°C 8.2KΩ@30°C 10.0KΩ@25°C 12.3KΩ@20°C 16.4KΩ@15°C 18.5KΩ@10°C</p>			

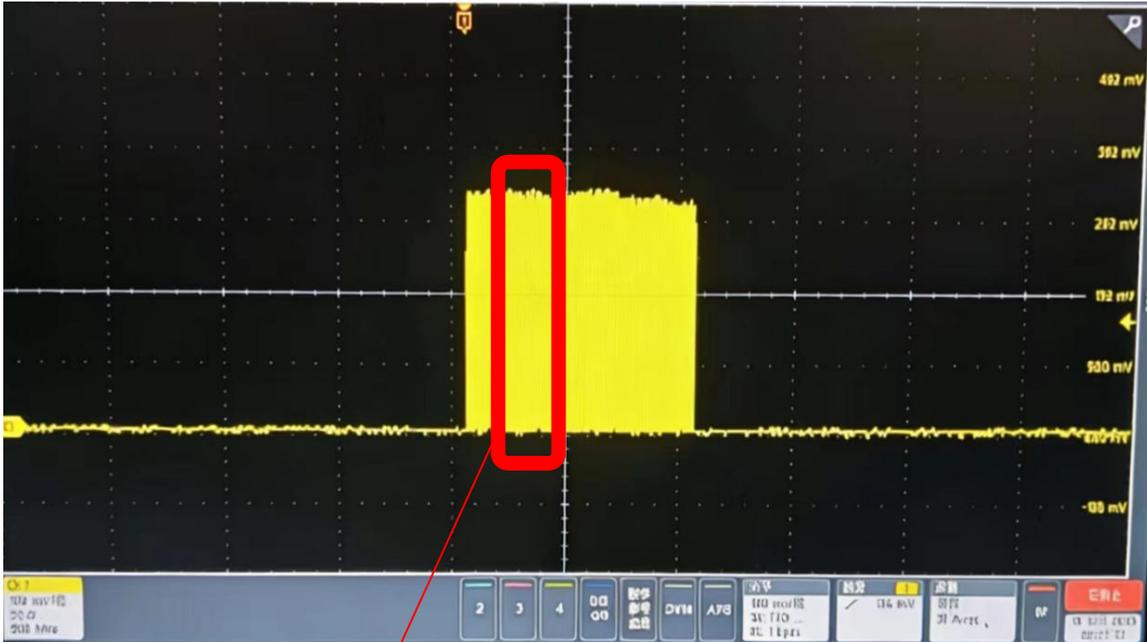
(1) after warm-up time at operating case temperature (RMS 8 hours)

(2) fiber is removable. The fiber end to the laser is FC/PC connector and the other end is SAM905 connector.

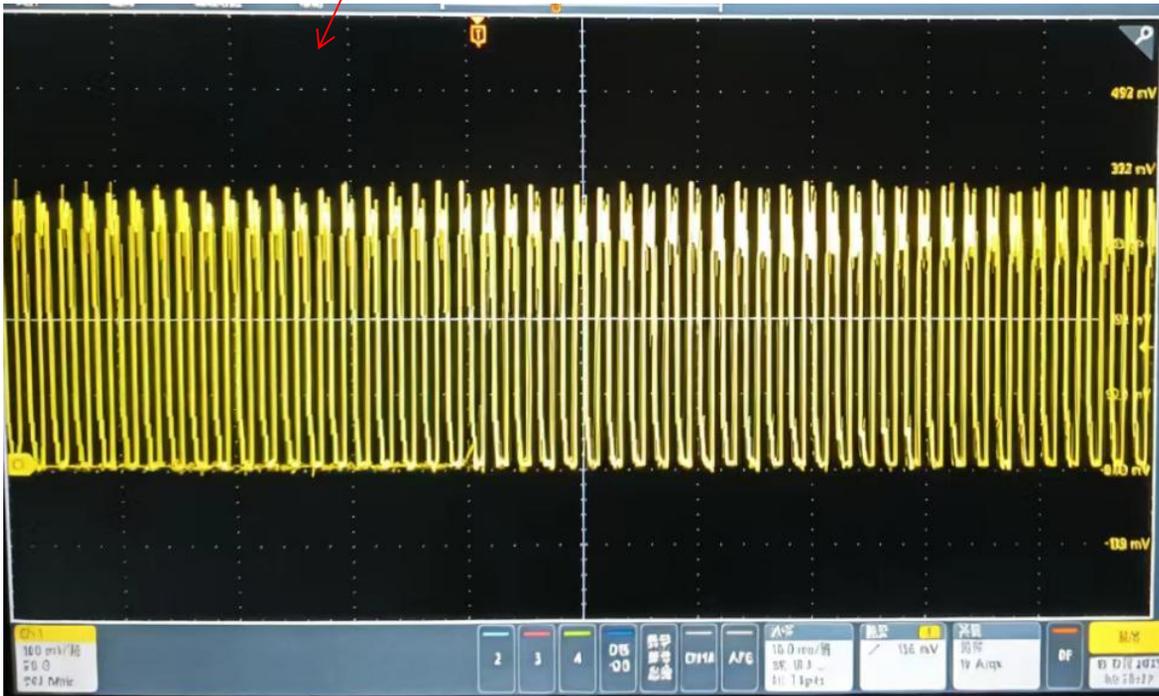
(3) T is one optimum LD operating temperature between 15 to 35°C reflected by NTC resistance and will be advised in each test report

Picture 1

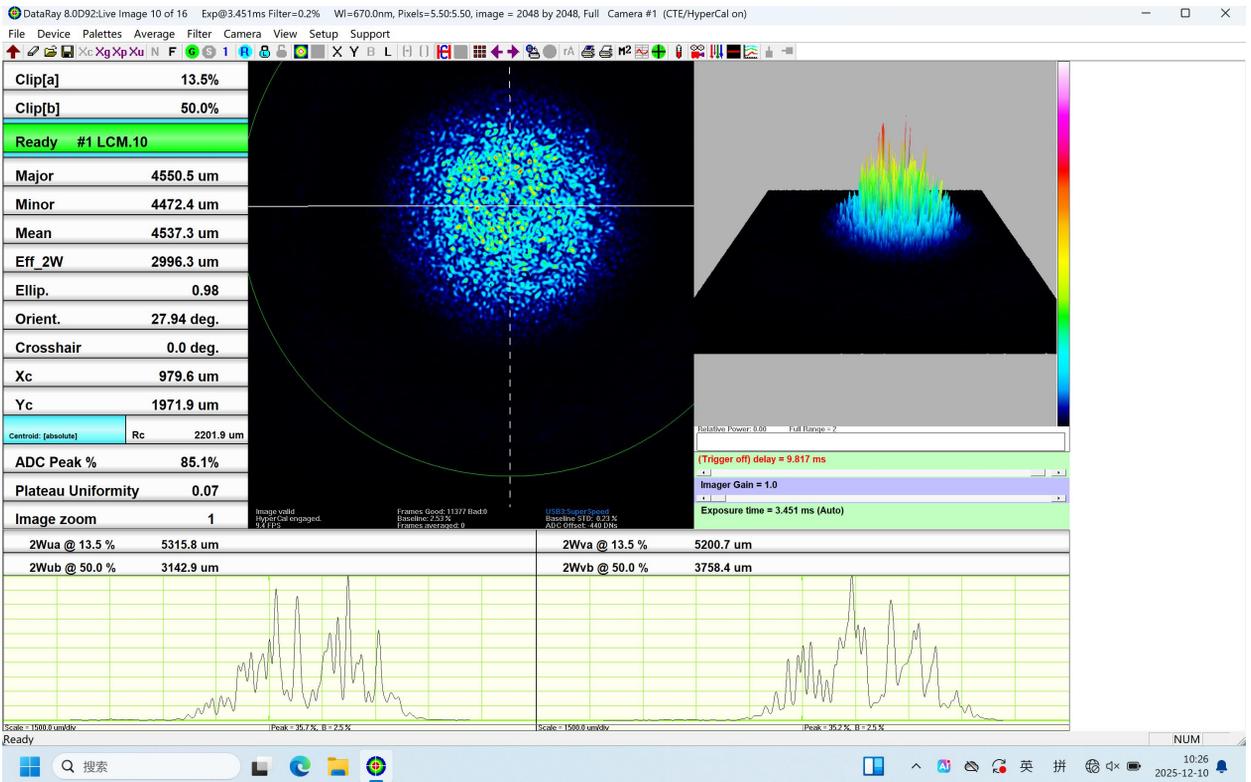
The micro-pulse width is 200 μ s, and the pulse interval is 0.5ms (example)



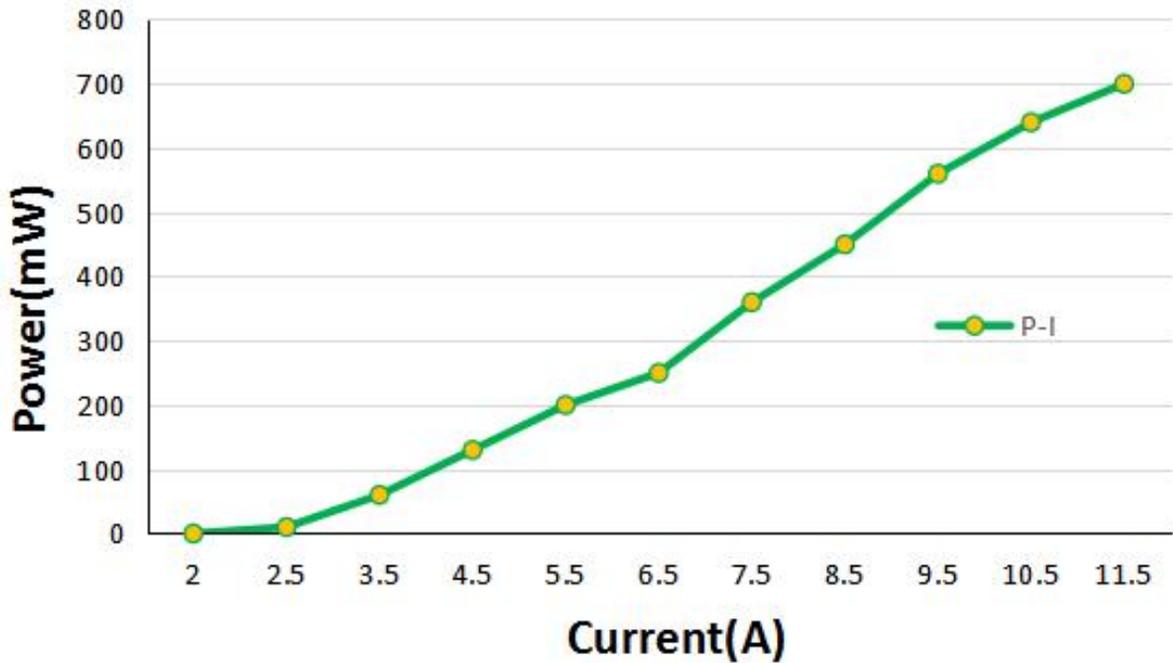
(magnify)



Picture 2 (Example)



PI Current (Example)



Laser Output Power & PD Monitor Current (Example)

