



## 1535nm Micro-pulse fiber laser



- **Product Description**

This product is an eye-safe 1550nm micro-pulse fiber laser developed by Idealphotonics. It has high electro-optical conversion efficiency, low ASE, low power consumption and nonlinear effect noise, and a wide temperature operating range. This product is suitable for use as an emitting light source for laser surveying and ranging.

- **Product features**

**Compact structure、 High power、 Excellent beam quality**



## ● Part Number

MP-PLS-NS-4-1535-1W

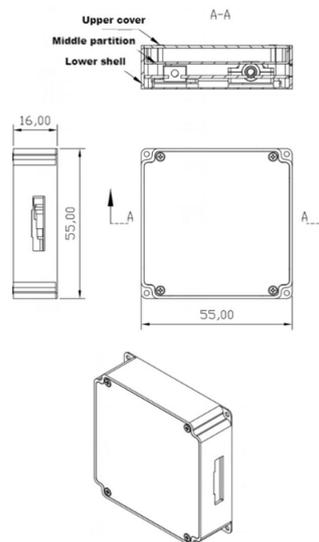
## ● Application area

Laser Distance Measurement、 Optical communications、 Bio-medicine

## ● Core parameters

Center Wavelength	Peak Wavelength	Repetition Frequency
1535nm	700W	0.5MHz

## ● Dimension Drawing



Note: The above is the standard size of 55\*55\*15mm.  
 Customized structures such as special-shaped and open structures  
 that are easy to integrate can be provided according to customer needs.

## ● General Parameters

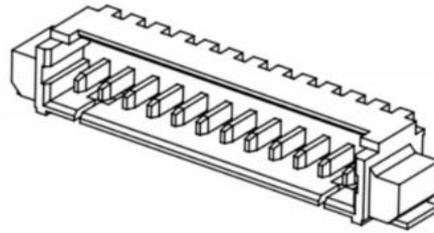
Parameter	Unit	Min.	Typical Value	Max	Note
Working Mode		Pulse			
Central wavelength	nm	1533	1535	1537	Customizable CWL 1550 ± 2nm
Pulse width(FWHM)	ns	3	4	5	Fixed, customizable 1~10ns
Repetition frequency	MHz	0.1	0.5	2	Adjustable
Average power	W	0.7	1	1.1	@3ns, 500kHz, 25C,100% DAC setting
Peak power	W	600	700 ①	750	
Spectral distribution	%			5	@700W peak power
Polarization state	NA	Random			
Trigger mode	NA	External trigger			

Pulse trigger signal and light output delay time	ns	20		30	
Pulse light output delay jitter	ps	80	100	150	Based on reference light
Electrical power consumption	W			13	@Typical output 1W
Operating voltage	V	9	12	13	
Operating temperature(@housing)	°C	-40		85	Laser shut off at 95°C
Storage temperature	°C	-40		90°C	
Package size	mm	55x55x16			
Weight	g		60	70	
Optical output mode		FC/APC			Customizable collimator output
Output fiber length	m		0.5		900T casing
Electrical interface model		CJT conn,A1251WRA-S-12P			

Note: ①Typical value@3ns, 500khz, 1W, 25°C.

## Electrical parameters

### Electrical interface definition



The laser uses a 12-pin socket with CJT conn model A1251WRA-S-12P, with a pin spacing of 1.25mm. The pin definitions are shown in the following table:

Pin	Name	INPUT/OUTPUT	Function Description
1	GND	Power	GND
2	GND	Power	GND
3	POWER	Power	+12V power supply
4	POWER	Power	+12V power supply
5	UART TX	output	LVTTTL, UART TX output
6	UART RX	Input	LVTTTL, UART RX input
7	NA	NA	NA
	Trigger Clock_in	Input	LVTTTL3.3V
9	Pump Enable	Input	LVTTTL input
			1:Enable pump laser



			0:Close pump laser
			Internal latched down to GND level with 100KQ.
10	NA	NA	NA
11	NA	NA	NA
12	NA	NA	NA

**Note: Some lasers are customized to use scattered wires, and their pin function definitions are as shown in the table above.**