

1550nm highly integrated polarization-maintaining pulse light source module(1.2uJ)



● Product Description

Idealphotonics' 1550nm pulsed polarization-maintaining light source is a pulsed fiber laser designed for short-range coherent Doppler wind laser radar applications. The unique technically approved single-frequency narrow linewidth seed source has a linewidth of less than 3KHz. Together with the acousto-optic modulator, the 1550nm pulse light source produces a high turn-off ratio pulse signal of >100dB, an output polarization



extinction ratio of >18dB, and a single pulse energy of 1.2μJ, making it an ideal light source for sensing applications such as laser radar

● Product features

Eye-safe output wavelength: 1550nm、 Single pulse energy 1.2μJ、 Peak output reaches 6W、 Ultra-narrow line width can be as low as 3kHz

● Part Number

MP-PLS-NS-200-1550-6W-M

● Application area

Doppler wind laser radar、 Pollution monitoring、 Other scientific research

● Core parameters

Center Wavelength	Pulse Width	Peak Power
1550nm	200ns	6W

● General Parameters

Parameters

Parameter	Unit	Min.	Typical value	Max.
Operating wavelength range	nm	-	1550	-
Spectral linewidth	kHz	-	-	3
Pulse energy	μJ	0.6	1.2	-



Parameter	Unit	Min.	Typical value	Max.
Pulse average optical power	mW	-	12	-
Output peak optical power	W	3	6	-
Pulse width	ns	100	200	-
Pulse repetition frequency	kHz	10	-	20
Spectral signal-to-noise ratio	dB	45	-	-
Pulse extinction ratio	dB	90	-	-
Polarization extinction ratio	dB	18	-	-
AOM frequency shift	MHz	-	80	-
Beam quality	M ²	-	-	1.1
Fiber type	PM1550			
Operating temperature range	°C	-10	-	+60
Storage temperature range	°C	-40	-	+85
Humidity	%	5	-	90

Mechanical structure

Structure type	Parameter	Specification	Note
Modular	Dimension	200*180*47mm	Customizable
	Fiber type	PM1550	
	Pigtail length (mm)	500+/-10mm	
	Connector type	FC/APC	

Electrical properties

Parameter	Min.	Typical value	Max.	Unit	Note
Supply voltage	-	24	-	V	
Total power	-	-	40	W	

Communication type

Structure type	Parameter	Specification	Note
Modular	Communication interface	DB25 PIN	Customizable
	Protocol	RS232	
	Communication User Interface	Output optical power can be read or set	

Ordering Information

MP-PS-CW-O-FT-FL-CT

WR: central wavelength 1550=1550nm

O: output pulse energy 1.2 μ J=1.2 μ J

FT: Fiber type 0.9PM=0.9mm Polarization-maintaining

FL: Fiber length 0.5m=0.5m

CTConnector type FC/APC