

Polarization Maintaining Pulse Source

1. Product Description

Beogold's 1550nm pulsed fiber laser source is used in the ranging lidar. It is a Polarization-maintaining product. The pulsed seed source is patented design by Beogold, used together with the fiber amplifier, which is the ideal source for the Doppler wind measurement lidar.

2. Feature

- Eye safety output wavelength 1550nm
- High optical output power, excellent stability
- Optional module and table structure
- High optical output power, excellent stability



3. Application

- Doppler wind LiDAR
- Environmental monitoring
- Pollution monitoring
- Scientific research

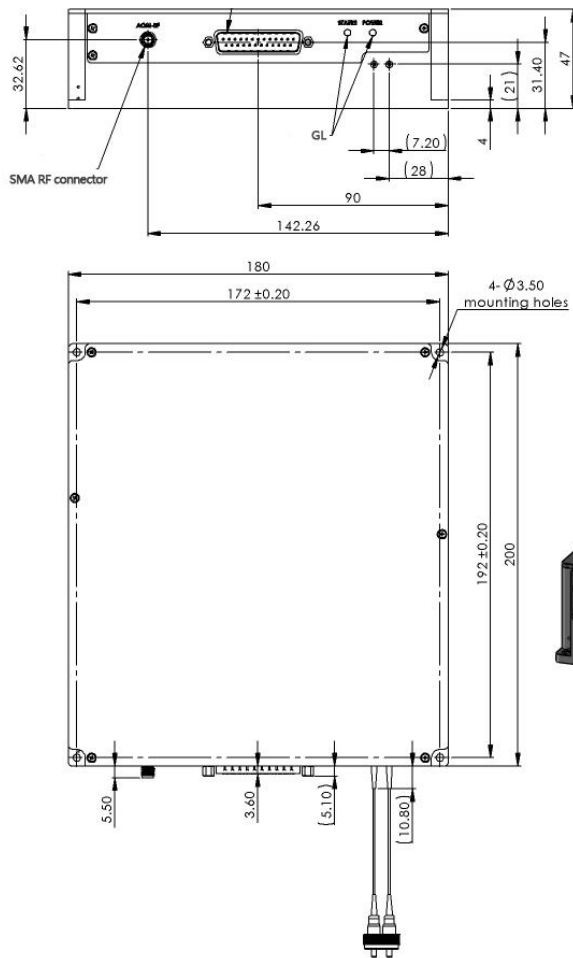
4. Optical Specification

Parameter		Symbol	Min.	Typ.	Max.	Unit	Mark
Seed Source	Wavelength	λ	-	1550	-	nm	
	Linewidth	-	-	1.8	3	kHz	
	RIN	-	-	-	-100	dB/Hz	
Acousto-optic Modulation Frequency Shift		-	-	80	-	MHz	
Output Light	Pulse Width	PW	100	200	-	ns	Externally trigger, adjust by RS232 Serial
	Repetitive Frequency	PRF	10	10	20	Khz	
	Pulse Peak Power	P_{peak}	3	6	-	W	PW = 200ns, 10 kHz < PRF < 20 kHz
	Single Pulse Energy	E_{out}	0.6	1.2	-	μ J	
	Average Power	P_{avg}	-	12	-	mW	
	Spectrum Signal-noise Ratio	SNR	45	-	-	dB	
	Polarization Signal-noise Ratio	ER	18	-	-	dB	
	Constant Temp Pulse Energy Change	ES	-	-	5	%	Test time: 2hours Temperature: 25°C
	Polarization States	Pol	Slow axis on, fast axis off			-	
	Output Fiber Type	OF	PM1550			μ m	900um tube
Output Terminal	OT	FC/APC			-		
Fiber Length	FL	300	350	400	mm		
Beam Quality	BQ	-	-	1.1	M^2		

Lo-output	Seed Optical Splitting	STP	1	-	-	mw	
	Monitor Peak Power	STP _{peak}					
	Output Fiber Type	STF	PM1550			-	900um tube
	Fiber Connector	STC	FC/APC			-	
	Fiber Length	FL	300	350	400	mm	

5. Mechanical Structure

Structure Type	Parameter	Specification	Unit	Remark
Module	Dimensions	200*180*47	mm	Customized



6. Electrical Specification

Parameter	Min.	Typ.	Max.	Unit	Remarks
Electrical Interface	DB25PIN			/	
Control Mode	ACC			/	
Control Interface	RS232			/	
	SMA Externally Trigger				
Input Voltage	18	24	24	VDC	
Power Consumption	-	-	40	W	
Run-up Time	-	-	1	Min	

7. Communication Type

Item	Value	Unit
Baudrate	115200	Bit/s
Data Bits	8	Bit
Stop Bits	1	Bit
Parity	None	-
Flow Control	None	-

8. Working Environment

Parameter	Min.	Typ.	Max.	Unit	Remarks
Working Temperature Range	0	-	+60	°C	
Storage Temperature Range	-40	-	+85	°C	
Relative Humidity	5	-	95	%	
Cooling Method	Dissipate heat through the bottom of the module				