

# PM C-Band Sweep Wavelength Laser Module

## Features

- Wavelength sweep range up to 40nm
- High output Power( $\geq 10\text{mw}$ )
- High Side-Mode Suppression Ratio (SMSR)
- High wavelength and power stability

## Applications

- Interferometric fiber optic sensing
- Fiber Bragg grating demodulation system
- Optical Test and Instrumentation

The C-Band Sweep Wavelength Laser Module(SWLM) has excellent optical performance in terms of wide wavelength Sweep Range, high output power stability, high side-mode-suppression ratio (SMSR), and relatively fast sweeping speed. It is widely used in fiber Bragg grating demodulation system and optical passive device test system. The sweeping step is 1GHz, and the sweeping speed can reach 10Hz in the range of 40nm. The products are Telcordia GR-468 qualified, and in compliance with RoHS Directives.

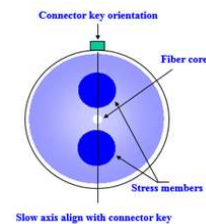
## Specifications

Parameters	Unit	Values	Symbol	Test Conditions
Wavelength Sweep Range	nm	1528~1568	$\lambda_c$	
Peak Optical Output Power	mW	$\geq 10$	$P_o$	
Sidemode Suppression Ratio	dB	$\geq 40$	SMSR	CW
Polarization Extinction Ratio	dB	$\geq 20$	PER	
Optical Isolation	dB	$\geq 35$		
Sweep Step	GHz	$\geq 1$		
Sweep Speed	Hz	$\geq 10$		
Absolute Accuracy	pm	$\pm 10$ , Type<5		
Relative Accuracy	pm	$\pm 5$ , Type<2		
Wavelength Repeatability	pm	$\pm 2$ , Type<1		
Wavelength Stability	pm	$\pm 2$		
Power Stability	dB	$\pm 0.05$		
Power Flatness	dB	$\leq 0.5$		
Relative Intensity Noise	dB/Hz	$\leq -135$	RIN	
Voltage Supply	V	4.75~5.25	$V_{CC}$	
Dimension L×W×H	mm	101.6×57×17.7		
Operating Voltage	V	4.75~5.25	V	
Power Consumption	W	$\leq 6$	P	@25°C
Max Power Consumption	W	$\leq 10$	$P_{max}$	@-20~65°C
Operating Temperature	°C	-20 ~ +65	$T_{op}$	
Storage Temperature	°C	-40 ~ +85	$T_s$	

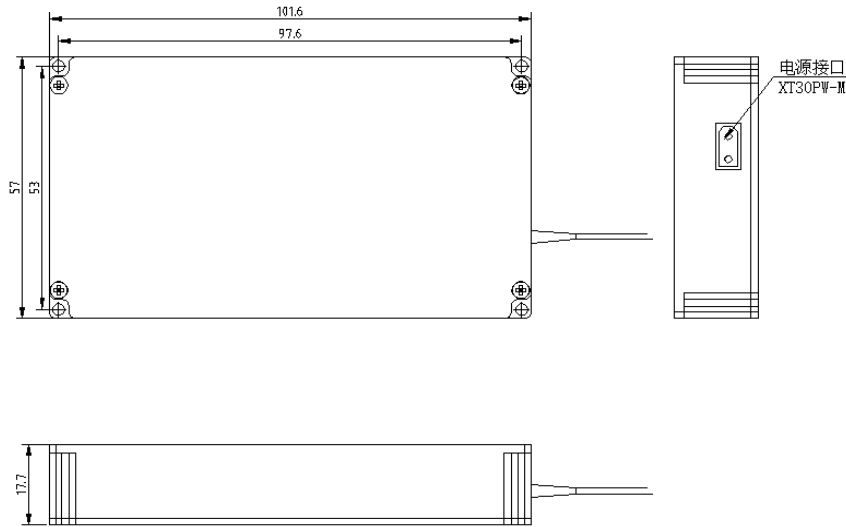
## Module Interface Connector:

Name	Description
XT30PW-M	Power Supply

Note: 5V/3A DC power supply as 2-PIN connector



**Package Dimensions (mm)**



**Ordering Information**

**PMSWLM- ①-②②-③③-④④-⑤⑤⑤-⑥⑥⑥⑥⑥⑥-⑦-⑧⑧**

①	Sweep Range	C=C Band;
②	Sweep Step	01=1GHz; 02=2GHz; 50=50GHz; XX=Customization;
③	Sweep Speed	10=10Hz; XX=Customization;
④	Optical Power	10=10mW; 20=20mW; XX=Customization;
⑤	Pigtail Type	250=250μm Bare Fiber; 900=900μm Loose Tube;
⑥	Fiber Type	PM1550;
⑦	Fiber Length	1=1m;
⑧	Connector	NE=None; FA=FC/APC; FC=FC/UPC; SA=SC/APC; SC=SC/UPC; LC=LC/UPC; XX=Others;