

## Ultra-stable PM Fiber Patch Cable

### ◆ Product introduction

The ultra-stable polarization-maintaining single-mode fiber patch cable developed by CSRayzer is specially designed. Compared with the conventional polarization-maintaining fiber patch cable, it has the characteristics of ultra-high extinction ratio, low loss and high power, which ensures that the polarization direction of polarization state will not change when transmitting polarized light signals. Each polarization-maintaining patch cable is tested separately at the alignment wavelength to ensure the polarization extinction ratio and loss at the optical fiber connection, which is widely used in optical path systems with extremely high polarization state requirements, such as quantum calculation and quantum precision measurement systems. CSRayzer provides a variety of customization services for polarization-maintaining single-mode patch cable, such as any wavelength between 350-2000nm and any length.



### ◆ Product features

- The cutoff wavelength can be selected from 350-2000nm.
- Low loss
- High extinction ratio output
- High withstand power optional

### ◆ Application

- Quantum computing
- Cold Atom
- Quantum precision measurement
- Quantum communication

### ◆ Technical indicators

Parameter	unit	Value					
Wavelength Range	nm	350-460	400-680	460-700	620-850	770-1100	970-1550
Test Wavelength	nm	361	405	488/509	630	780/852	980/1064
Optical Fiber Type		PM-S350-HP	PM-S405-XP	PM460-HP	PM630-HP	PM780-HP	PM980
Cutoff Wavelength	nm	315±25	380±20	410±40	570±50	710±60	920±50
Typical Insertion Loss	dB	1	1	1	1	0.8	0.5
Maximum Loss	dB	1.2	1.2	1.2	1.2	1	0.8
Polarization Extinction Ratio (conventional)	dB	18	18	18	20	20	22
Polarization Extinction Ratio (ultra-stable)	dB	23	25	25	25	25	25
Core NA		0.12					

Core Diameter	μm	2.5	3	3.5	4.5	5.5
Mode Field Diameter	μm	2.3@350nm	3.3±0.5@405nm	4.5±0.5@630nm	5.3±1@850nm	6.6±0.5@980nm
Peak Power	mW	100mW/300mW/2W/5W optional.				
Connector		FC/APC or FC/PC is optional.				
Cable Length	M	1/2/3/5/10/15 optional				
Casing Diameter		900μm loose casing /3mm casing is optional.				

