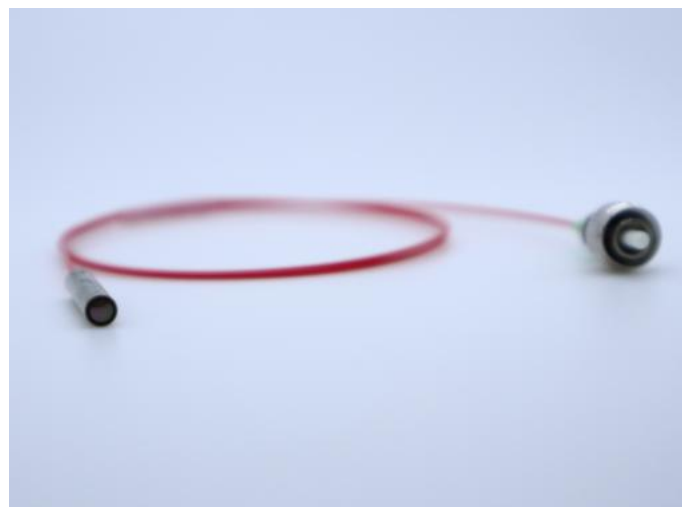


## Polarization-Maintaining Fiber Collimator

780nm (Working Distance 300mm)



### ● Product Description

It is composed of polarization-maintaining fiber pigtail and focusing lens with precise positioning and packaging, which can transform the outgoing light of fiber transmission into parallel beam (Gaussian beam), or focus and couple the parallel light from the outside into the fiber. It can be used alone to achieve the specified size spot at the required position; it can also be used in pairs, adding filters, isolators and other optical components between a pair of probes to achieve the purpose of customer use. In the interferometric fiber sensor based on optical coherence detection, the use



of polarization-maintaining fiber can ensure that the linear polarization direction remains unchanged, improve the coherent signal-to-noise ratio, and achieve high-precision measurement of physical quantities.

## ● Product features

Ensure partial compatibility; Low insertion loss; High precision straight;  
Compact type; Anti reflective film

## ● Part Number

MP-CLM-780-300-1.3-FA

## ● Application area

Fiber Optic Communication | Data Sensing | Industrial Inspection | Medical  
Equipment | Instrument Integration

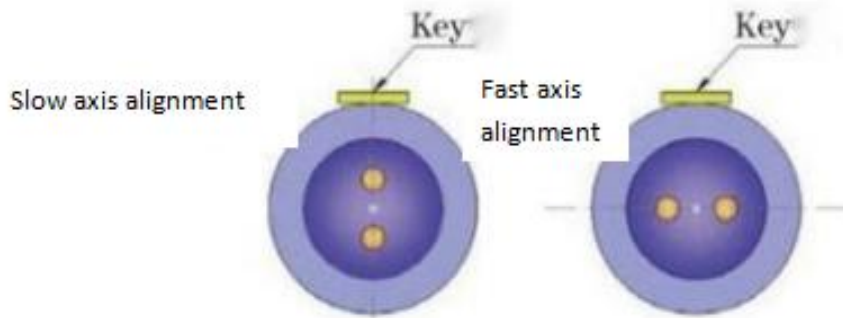
## ● Core parameters

Working Wavelength	Bandwidth	Working Distance
780nm	±20nm	300mm

## ● General Parameters

When making a polarization-maintaining device connector, the cat's eye connection axis direction is perpendicular to the keyway direction, also known

as slow axis alignment, and vice versa is fast axis alignment. As shown in the figure:



**Product model diagram**



**Parameters**

PM630 Polarization-Maintaining Fiber Collimator (Fixed Working Distance)									
Working wavelength	Band width	Working distance	Beam waist	Beam divergence	Packaging diameter	Connector	Output loss (excluding connector)	Return loss	Mode field core diameter



			spot	angle					ter
635nm	± 20nm	100 mm	0.39 mm	2.6m rad	3.4m m	FC/AP C	≤0.5dB	≥55dB	4.5± 0.5um
635nm	± 20nm	300 mm	0.85 mm	1.0m rad	3.4m m	FC/AP C	≤0.5dB	≥55dB	
635nm	± 20nm	1000 mm	1.32 mm	0.7m rad	4.0m m	FC/AP C	≤0.5dB	≥55dB	
<b>PM780 Polarization-Maintaining Fiber Collimator (Fixed Working Distance)</b>									
Working wavelength	Band width	Working distance	Beam waist spot	Beam divergence angle	Pack aging diameter	Conn ector	Output loss (excluding connector)	Return loss	Mode field core diameter
780nm	± 20nm	100 mm	0.41 mm	2.4m rad	3.4m m	FC/AP C	≤0.5dB	≥55dB	5.2± 1.0um
780nm	± 20nm	300 mm	0.75 mm	1.3m rad	3.4m m	FC/AP C	≤0.5dB	≥55dB	
780nm	± 20nm	1000 mm	1.55 mm	0.7m rad	4.0m m	FC/AP C	≤0.5dB	≥55dB	
<b>PM980 Polarization-Maintaining Fiber Collimator (Fixed Working Distance)</b>									



Working wavelength	Band width	Working distance	Beam waist spot	Beam divergence angle	Packaging diameter	Connector	Output loss (excluding connector)	Return loss	Mode field core diameter	
980nm	± 20nm	100 mm	0.50 mm	2.5m rad	3.4m	FC/APC	≤0.35dB	≥55dB	6.6± 0.5um	
980nm	± 20nm	300 mm	0.96 mm	1.3m rad	3.4m	FC/APC	≤0.35dB	≥55dB		
980nm	± 20nm	1000 mm	1.48 mm	0.87 mrad	4.0m	FC/APC	≤0.35dB	≥55dB		
1064nm	± 20nm	100 mm	0.51 mm	2.7m rad	3.4m	FC/APC	≤0.35dB	≥55dB		
1064nm	± 20nm	300 mm	0.90 mm	1.5m rad	3.4m	FC/APC	≤0.35dB	≥55dB		
1064nm	± 20nm	500 mm	1.43 mm	0.95 mrad	4.0m	FC/APC	≤0.35dB	≥55dB		
1064nm	± 20nm	1000 mm	1.48 mm	0.87 mrad	4.0m	FC/APC	≤0.35dB	≥55dB		
<b>PM1300nm Polarization-Maintaining Fiber Collimator (Fixed/Adjustable Working Distance)</b>										
Working	Band	Work	Bea	Beam	Pack	Conn	Outpu	Matin	Return	Mode



wavelength	width	working distance	beam waist spot	beam divergence angle	packaging diameter	connector	output loss	maintaining loss	return loss	mode field core diameter
1310nm	± 20nm	100 mm	0.4 mm	4.2m rad	3.4m	FC/APC	≤ 0.35dB	≤ 0.7dB	≥ 55dB	9.3 ± 0.5um
1310nm	± 20nm	300 mm	0.8 mm	2.1m rad	3.4m	FC/APC	≤ 0.35dB	≤ 0.9dB	≥ 55dB	
1310nm	± 20nm	1000 mm	1.2 mm	1.4m rad	4.0m	FC/APC	≤ 0.35dB	≤ 1.1dB	≥ 55dB	
<b>PM1550nm Polarization-Maintaining Fiber Collimator (Fixed/Adjustable Working Distance)</b>										
Working wavelength	Band width	Working distance	Beam waist spot	Beam divergence angle	Packaging diameter	Connector	Output loss	Maintaining loss	Return loss	Mode field core diameter
1550nm	± 20nm	100 mm	0.45 mm	4.4m rad	3.4m	FC/APC	≤ 0.5dB	≤ 0.7dB	≥ 55dB	10.1 ±
1550nm	± 20nm	300 mm	0.86 mm	2.3m rad	3.4m	FC/APC	≤ 0.5dB	≤ 0.9dB	≥ 55dB	0.5um



1550nm	±	500	1.3	1.5m	4.0m	FC/AP	≤	≥	
	20nm	mm	mm	rad	m	C	≤0.5B	1.1dB	≥55dB

**Beam waist spot diameter:** Take the Gaussian beam at  $1/e^2$ , and select the theoretical calculated value of single-mode optical fiber of each wavelength

**Matching loss:** - Fiber collimator couples the free space beam between the two

**Packaging material, packaging size and other fiber connector types can be customized**