

Ultra long distance collimating lens 1550nm (5KM focal length 400mm FC/APC)



● Product Description

The optical fiber output is collimated and reshaped into a large spot, suitable for high-power, long-distance transmission, and pulsed output lasers. Within the operating range, the light exhibits excellent collimation, with a uniform energy distribution and sharp, clear edges. The design adopts a multi-lens series with air gaps, compatible with single-mode, multi-mode, and large-core optical fibers, enabling functions such as remote sensing, illumination, and interference.

● Product features

Standard fiber optic input with FC or SMA connectors、 Collimated space beam output、 Suitable for wavelengths in the range of 405 nm to 1.55 μm 、 Collimation distance suitable for ≥ 2 km、 Beam energy concentration、 Multi-lens design with dual-sided antireflection coating on lenses to improve transmission efficiency

● Part Number

MP-CLM-1550-175-5-M

● Application area

LiDAR | Free-space optical communication | Industrial processing and measurement | Defense and security | Scientific research and experimentation

● Core parameters

Wavelength	Transmission Distance	Fiber Type	Connector
1550nm	5km	62.5/125	FC/APC

● General Parameters

525nm Ultra-long Distance Collimating Lens						
Working Wavelength	Output Spot Diameter	Beam Divergence Angle	Effective Focal Length mm	Transmission Distance	Fiber Type	Connector
525±20nm	80	0.20mrad	250	2km	62.5/125	FC/APC
	100	0.15mrad	320	3km		FC/PC
	150	0.10mrad	400	5km		SMA905
905nm Ultra-long Distance Collimating Lens						
Working Wavelength	Output Spot Diameter	Beam Divergence Angle	Effective Focal Length mm	Transmission Distance	Fiber Type	Connector
905±20nm	80	0.20mrad	250	2km	62.5/125	FC/APC
	100	0.15mrad	320	3km		FC/PC
	150	0.10mrad	400	5km		SMA905
1550nm Ultra-long Distance Collimating Lens						
Working Wavelength	Output Spot Diameter	Beam Divergence Angle	Effective Focal Length mm	Transmission Distance	Fiber Type	Connector
1550±20nm	80	0.20mrad	250	2km	62.5/125	FC/APC
	100	0.15mrad	320	3km		FC/PC
	150	0.10mrad	400	5km		SMA905