

Ultra-long distance collimating lens 525nm (5KM focal length 400mm)



● 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-NIR-CLM-W905-80-2-62.5/125-SMA905

● 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
905m	2km	62.5/125	SMA905

● General Parameters

525nm Ultra-long Distance Collimating Lens						
Working	Output	Beam	Effective	Transmissio	Fiber	Connector



Wavelength	Spot Diameter	Divergence Angle	Focal Length m	Transmission Distance	Type	Connector
525 ± 20nm	80	0.20mrad	250	2km	62.5/12	FC/APC
	100	0.15mrad	320	3km		FC/PC
	150	0.10mrad	400	5km	5	SMA90 5
905nm Ultra-long Distance Collimating Lens						
Working Wavelength	Output Spot Diameter	Beam Divergence Angle	Effective Focal Length m	Transmission Distance	Fiber Type	Connector
905 ± 20nm	80	0.20mrad	250	2km	62.5/12	FC/APC
	100	0.15mrad	320	3km		FC/PC
	150	0.10mrad	400	5km	5	SMA90 5
1550nm Ultra-long Distance Collimating Lens						
Working Wavelength	Output Spot Diameter	Beam Divergence Angle	Effective Focal Length m	Transmission Distance	Fiber Type	Connector



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1550 ± 20nm	80	0.20mrad	250	2km	62.5/12	FC/APC
	100	0.15mrad	320	3km		FC/PC
	150	0.10mrad	400	5km	5	SMA90 5