

Ultra-long distance collimating lens 905nm (2KM focal length 250mm 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-905-110-2-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 |
|------------|-----------------------|------------|-----------|
| 905m | 2km | 62.5/125 | FC/APC |

● 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 |



| | r | | m | | | |
|--------------------|-----|----------|-----|-----|---------|----------------|
| 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 |