

## Ultra long distance collimating lens 525nm

### (5KM focal length 400mm FC/PC)



#### ● 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  $\mu\text{m}$ 、 Collimation distance suitable for  $\geq 2$  km、 Beam energy concentration、 Multi-lens design with dual-sided antireflection coating on lenses to improve transmission efficiency

## ● Part Number

MP-NIR-CLM-W525-150-5-62.5/125-FP

## ● 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 |
|------------|-----------------------|------------|-----------|
| 525nm      | 5km                   | 62.5/125   | FC/PC     |

## ● 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    |