

## **Super Long-Distance Collimating Lens 1550nm (2KM Focal Length 250mm 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-W1550-80-2-62.5/125-SMA905

## ● Application area

Lidar | Free space optical communication | Industrial processing and measurement | National defense and security | Scientific research experiments

## ● Core parameters

| Wavelength | Transmission Distance | Fiber Type | Connector |
|------------|-----------------------|------------|-----------|
| 1550nm     | 2km                   | 62.5/125   | SMA905    |

## ● General Parameters

| 525nm Ultra-long Distance Collimating Lens |                      |                       |                          |                       |            |           |
|--------------------------------------------|----------------------|-----------------------|--------------------------|-----------------------|------------|-----------|
| Working Wavelength                         | Output Spot Diameter | Beam Divergence Angle | Effective Focal Length m | 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 m | 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                   |            | SMA90     |

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|---------------------------------------------|----------------------|-----------------------|--------------------------|-----------------------|------------|-----------|
| 1550nm Ultra-long Distance Collimating Lens |                      |                       |                          |                       |            |           |
| Working Wavelength                          | Output Spot Diameter | Beam Divergence Angle | Effective Focal Length m | 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    |