

# Fixed Focus Large Beam Collimator 1550nm



## ● Product Description

Using air-gap cemented lenses, it can provide superior collimation performance compared to aspherical lenses and achromatic lenses. The low aberration lens group design achieves a beam closer to a Gaussian beam, with a smaller divergence angle and reduced wavefront error.

## ● Part Number

NIR-CLM-1550-6.9-0.016-SA

## ● Product features

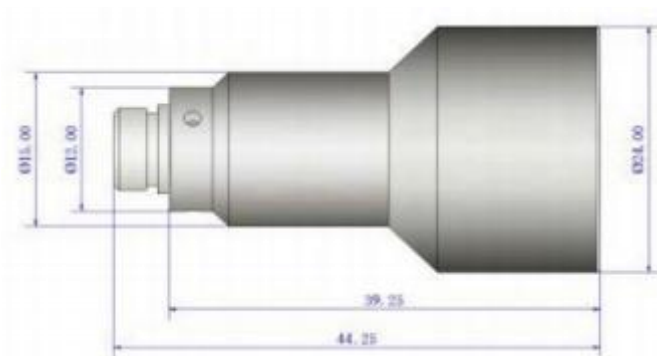
Multiple working wavelengths available、 Can be used for collimated emission or coupled reception、 Beam divergence angle (full angle)  $< 0.02^\circ$ 、 All lenses are coated with anti-reflection coating to minimize surface reflection 、 Standard FC/APC, FC/PC, SMA connectors

## ● Application area

Distributed fiber optic sensing ( $\psi$ -OTDR/ C-OTDR, DAS/DVS, BOTDA/ BOTDR)、Laser wind measurement radar、Optical coherence tomography、Spectral measurement / ns-level optical pulse detection

## Parameters

Dimensional Drawing



Technical Parameters

| Center Wavelength | Lens Coating Wavelength | Waist Spot | Beam Divergence Angle | Effective Focal Length | Numerical Aperture (Lens) | Package Diameter | Input Fiber Type | Connector           | Transmission Rate |
|-------------------|-------------------------|------------|-----------------------|------------------------|---------------------------|------------------|------------------|---------------------|-------------------|
| 405nm             | 400-700nm               | 5.3 mm     | 0.009°                | 33.2 mm                | 0.27                      | 24.×42           | S405-HP          | FC/PC FC/APC SMA905 | >95%              |
| 450nm             | 400-700nm               | 5.8 mm     | 0.007°                | 33.5 mm                | 0.26                      | 24.×42           | 460HP            |                     |                   |
| 525nm             | 400-700nm               | 6.3 mm     | 0.006°                | 34.3 mm                | 0.26                      | 24.×42           | 460HP            |                     |                   |
| 635nm             | 400-700nm               | 7.0 mm     | 0.007°                | 35.3 mm                | 0.25                      | 24.×42           | 630HP            |                     |                   |
| 780nm             | 700-1050nm              | 7.4 mm     | 0.008°                | 36.0 mm                | 0.25                      | 24.×42           | 780HIP           |                     |                   |
| 850nm             | 700-1050nm              | 7.8 mm     | 0.008°                | 36.2 mm                | 0.25                      | 24.×42           | 780HP            |                     |                   |
| 980nm             | 700-1050nm              | 8.5 mm     | 0.009°                | 36.4 mm                | 0.25                      | 24.×42           | 980HP            |                     |                   |

|        |             |       |        |        |      |            |             |  |  |
|--------|-------------|-------|--------|--------|------|------------|-------------|--|--|
| 1064nm | 1050-1700nm | 7.9mm | 0.010° | 36.6mm | 0.25 | 24.×<br>42 | 980H<br>P   |  |  |
| 1310nm | 1050-1700nm | 6.6mm | 0.014° | 36.7mm | 0.24 | 24.×<br>42 | SMF-<br>28e |  |  |
| 1550nm | 1050-1700nm | 6.9mm | 0.016° | 37.1mm | 0.24 | 24.×<br>42 | SMF-<br>28e |  |  |