

Fiber Collimators

VenusLab-UWB Aspherical Collimator

The technical combination of high-precision, wide-wavelength, and focus-adjustable

- Single-lens Aberration Correction Design
- Wide-Wavelength High-Efficiency Transmission
- Multi-Wavelength Adaptive Adjustment
- Miniaturized Packaging Advantage
- Multi-Scenario Compatibility



One Platform Many Possibilities

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Get a Quote



Get Expert Advice
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www.venuslabtech.com

Overview

Introduction:

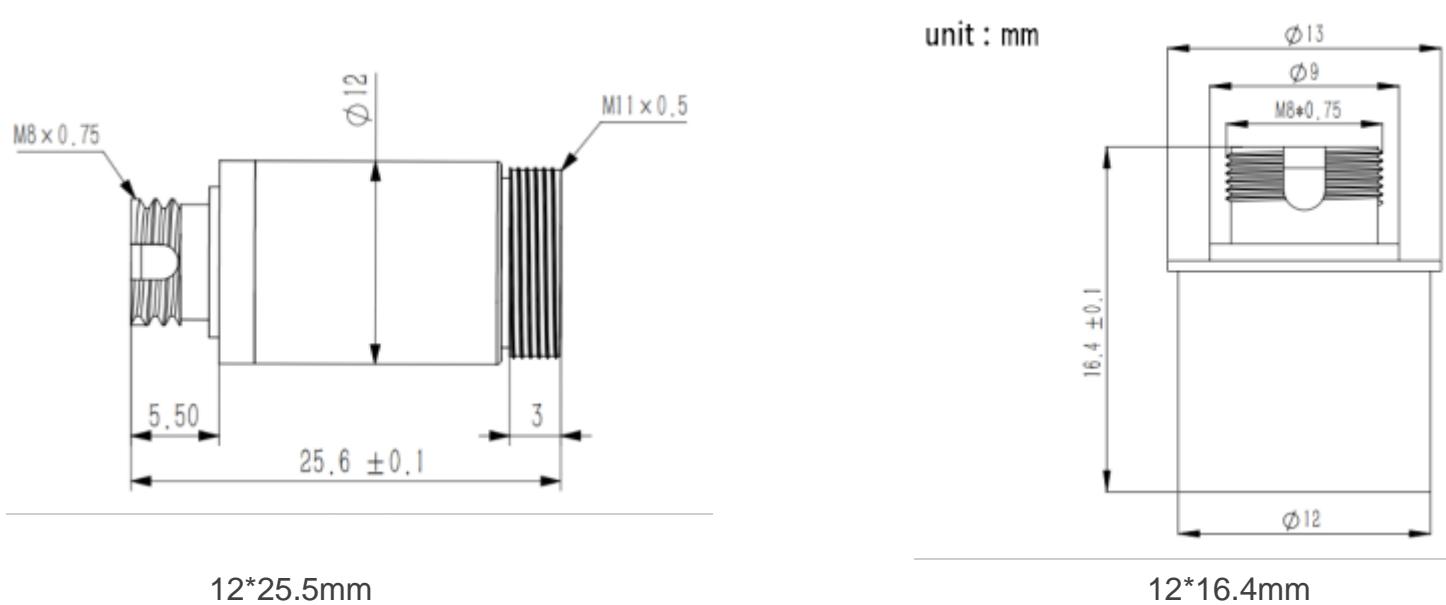
Aspheric collimators are high-performance optical devices designed based on precision aspheric lenses. Their core function is to convert divergent light beams output from optical fibers into highly collimated beams with high parallelism, or to efficiently couple external parallel light into optical fibers. They can achieve spherical aberration correction without the need for multi-element lens groups, solving the aberration issues of traditional spherical collimators.

They cover a wide wavelength range from 405nm to 1550nm, and after being coated with anti-reflection films on both sides, their transmittance exceeds 95%. They are packaged with non-magnetic stainless steel or brass (with a diameter of only 11mm), some models integrate a focus-adjustable mechanism, and they support single-mode/multi-mode optical fiber access.

Features:

- Aspherical Single-Lens Design
- Wide-Wavelength High-Efficiency Transmission
- Dual-Package Optional
- High Compatibility
- Strong Customization and Adaptability

Dimension:



Specification

Common Parameter Specification Table

Category of Common Parameters	Specific Parameter Description
Optical Core Design	Aspherical single-lens aberration correction design
Optical Transmission Performance	Double-sided broadband anti-reflection coating, transmittance > 95%
Interface Compatibility	Support standard fiber connectors such as FC/PC, FC/APC
Fiber Compatibility	Compatible with single-mode and multi-mode fiber access
Basic Customization Capability	Support customization of wavelength, fiber connector, and housing size
Environmental Adaptability	Compatible with in-situ devices such as temperature-controlled stages, operating temperature range: -196 to 600

Service & Support

We are dedicated to delivering exceptional optoelectronic solutions to every client. From precision manufacturing and secure delivery to full-lifecycle technical support, we are here to ensure a seamless and reliable experience at every step.

1. Warranty Policy

Quality First, Worry-Free Operation

Warranty Period: We offer a **two-year** warranty service for all of our core optoelectronic products, effective from the date of shipment.

Coverage: We provide free repair or replacement services for malfunctions caused by material defects or workmanship errors under normal operating conditions.

Rapid Response: Upon receiving a warranty claim, we guarantee to initiate the assessment process within **24 hours** to minimize your equipment downtime.

2. Technical Support

Expert Team, Full-Process Guidance

Technical Consultation: Our team of senior optical engineers provides **24/7 online support** to assist with installation, commissioning, optical path alignment, and parameter optimization.

Scheduled Maintenance: We offer full-lifecycle maintenance recommendations, including firmware upgrades, optical component cleaning guidelines, and precision calibration services.

Training Services: We provide customized remote or on-site operational and safety training to ensure your team can operate the equipment efficiently and safely.

3. Logistics & Delivery

Precision Packaging, Global Reach

Professional Packaging: Given the fragile nature of optical instruments, we utilize industrial-grade shockproof, anti-static, and moisture-proof vacuum packaging to ensure zero damage during transit.

Logistics Partners: We partner with top-tier global logistics providers (**DHL / FedEx / UPS / SF Express**) to offer reliable shipping with real-time tracking.

Shipping Insurance: All shipments are fully insured to eliminate logistics risks.

4. Compliance & Certification

Strict Standards, Total Compliance

Quality Certification: Our manufacturing process is **ISO 9001 certified**, and our products comply with international standards such as **CE and RoHS**.

Export Compliance: "Committed to environmental responsibility, all our products comply with **RoHS 2.0** and **REACH standards**, ensuring safety and global compliance."

Explore Series

Model	Beam Divergence Angle	Input Fiber Type	Package Diameter	Numerical Aperture (Lens)	Exit Spot Diameter (mm)	Effective Focal Length (EFL) (mm)
VenusLab-UWB-405nm	0.014°+0.01/-0	S405/PM460	12*25.5mm	0.15	2.5	15
VenusLab-UWB-450nm	0.013°+0.01/-0	460HP/PM460	12*25.5mm	0.15	3.29	15
VenusLab-UWB-488nm	0.013°+0.01/-0	460HP/PM460	12*25.5mm	0.15	3.29	15
VenusLab-UWB-520nm	0.013°+0.01/-0	460HP/PM460	12*25.5mm	0.15	3.3	15
VenusLab-UWB-638nm	0.017°+0.01/-0	630HP/PM630	12*25.5mm	0.15	3.2	15
VenusLab-UWB-660nm	0.018°+0.01/-0	630HP/PM630	12*25.5mm	0.15	3.26	15
VenusLab-UWB-785nm	0.021°+0.01/-0	780HP/PM780	12*25.5mm	0.15	3.18	15
VenusLab-UWB-850nm	0.023°+0.01/-0	780HP/PM780	12*25.5mm	0.15	3.24	15

VenusLab-UWB-980nm	0.026°+0.01/-0	Hi1060	12*25.5mm	0.15	3.21	15
VenusLab-UWB-1064nm	0.026°+0.01/-0	Hi1060	12*25.5mm	0.15	3.38	15
VenusLab-UWB-1310nm	0.036°+0.01/-0	9/125	12*25.5mm	0.15	3.04	15
VenusLab-UWB-1550nm	0.042°+0.01/-0	9/125	12*25.5mm	0.15	3.13	15

 Get in touch with our team to explore configurations, request a quote, or learn more about customized solutions tailored to your needs.

Let us help you move science forward—faster and smarter.

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