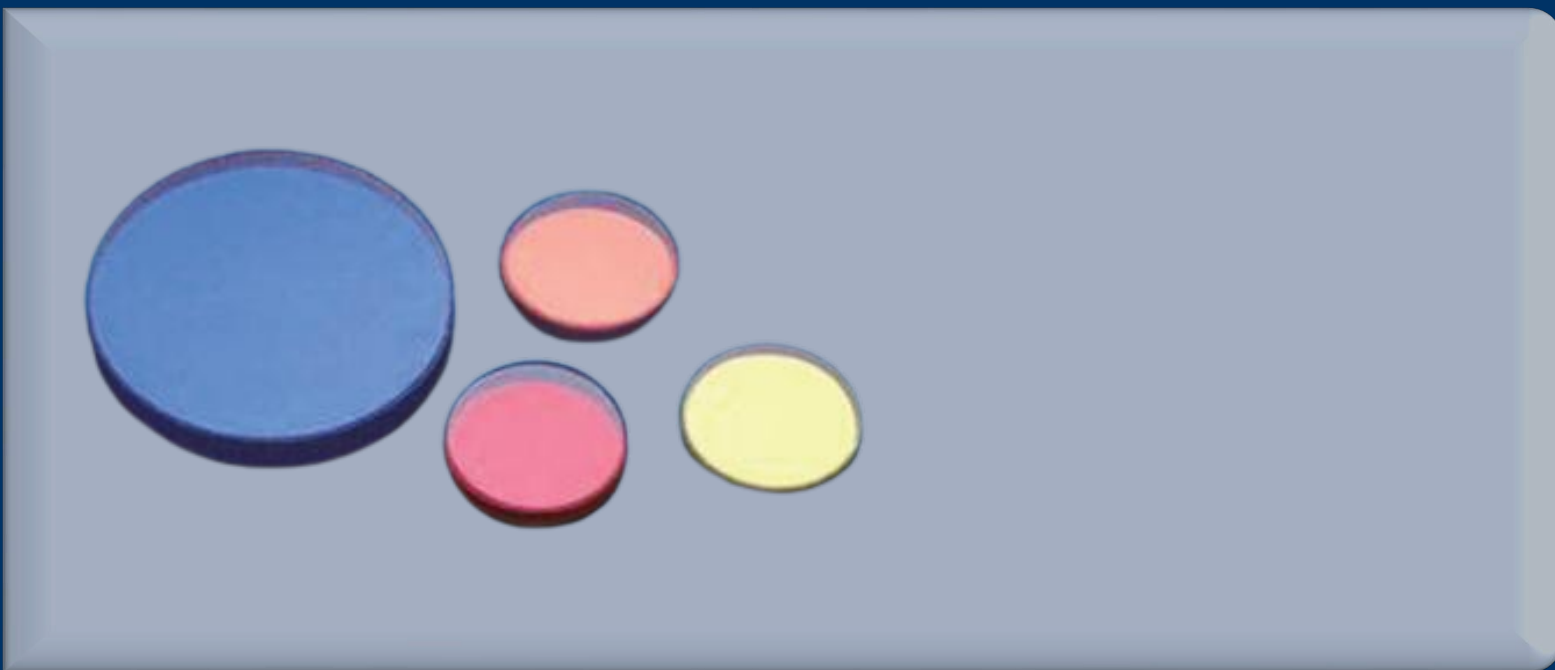


Optical Filter

Narrowband Interference Filter

High-selectivity optical component for wavelength isolation.

- Ultra-Narrow FWHM
- High Peak Transmission
- Deep Blocking Depth/OD
- Hard-Coated & Environmental Stability



One Platform Many Possibilities

Contact Us sales@venuslabtech.com

Get a Quote



Get Expert Advice
+658099 5547 (WhatsApp)



Visit Us
www.venuslabtech.com

Overview

Precision Spectral Isolation: Ultra-Narrow Bandwidth with Deep Background Suppression

Narrowband Interference Filters are critical components for high-sensitivity optical systems, specifically engineered to isolate a target Center Wavelength (CWL) from a complex spectral background. Utilizing advanced multi-layer thin-film interference technology, our filters achieve an ultra-narrow Full Width at Half Maximum (FWHM)—typically ranging from 1nm to 10nm—while providing deep out-of-band blocking up to OD4 or OD6.

VenusLab's narrowband filters are manufactured using Hard-Coating and Ion-Assisted Deposition (IAD) techniques. Unlike traditional soft-coated filters, our products offer superior durability and environmental stability, ensuring that the CWL does not shift due to changes in humidity or temperature. Whether for laser line cleaning, fluorescence microscopy, or industrial sensing, these filters significantly enhance the signal-to-noise ratio, allowing you to capture the most subtle optical signals with confidence.

Qualification

General Technical Specifications

Parameter	Specification (Data)
Dimensions	Ø 25.4 mm x 6.0 mm
Diameter Tolerance	+0.0 / -0.25 mm
Clear Aperture	> Ø 21.0 mm
Surface Quality	80-50 Scratch-Dig
Out-of-band Transmission	
-- Standard Grade	0.01% (OD4) @ CWL ± Range
-- High Performance	0.0001% (OD6) @ CWL ± Range

Spectral Performance & Tolerances

Nominal Bandwidth (FWHM)	FWHM Tolerance	CWL Tolerance
1 nm	± 0.2 nm	± 0.2 nm
3 nm	± 0.5 nm	± 0.5 nm
10 nm	± 2.0 nm	± 2.0 nm

Selection Chart

UV Series Ordering Guide

Item No.	Light Source	CWL (nm)	Diameter (mm)	FWHM (nm)	Peak Transmission (%)
VLNF25.4-193-15	Ar*F	193	25.4	15	> 12%
VLNF25.4-200-10	-	200	25.4	10	> 12%
VLNF25.4-214-10	Zn	214	25.4	10	> 12%
VLNF25.4-214-22	-	214	25.4	22	> 20%
VLNF25.4-220-10	-	220	25.4	10	> 12%
VLNF25.4-228-10	Cd	228	25.4	10	> 15%

VLNF25.4-228-25	-	228	25.4	25	> 20%
VLNF25.4-232-10	Ni	232	25.4	10	> 15%
VLNF25.4-239-10	Co	239	25.4	10	> 15%
VLNF25.4-239-25	-	239	25.4	25	> 20%
VLNF25.4-248-10	Kr*F	248	25.4	10	> 12%
VLNF25.4-253.7-10	Hg	253.7	25.4	10	> 12%
VLNF25.4-253.7-25	-	253.7	25.4	25	> 18%
VLNF25.4-253.7-40	-	253.7	25.4	40	> 20%
VLNF25.4-260-10	-	260	25.4	10	> 20%
VLNF25.4-265-10	Hg	265	25.4	10	> 12%
VLNF25.4-265-25	-	265	25.4	25	> 20%
VLNF25.4-270-10	-	270	25.4	10	> 12%
VLNF25.4-280-10	Hg	280	25.4	10	> 12%
VLNF25.4-280-25	-	280	25.4	25	> 20%
VLNF25.4-285-10	-	285	25.4	10	> 20%
VLNF25.4-289-10	Hg	289	25.4	10	> 15%
VLNF25.4-296.7-10	Hg	296.7	25.4	10	> 15%
VLNF25.4-300-10	-	300	25.4	10	> 15%
VLNF25.4-300-25	-	300	25.4	25	> 20%
VLNF25.4-300-40	-	300	25.4	40	> 20%
VLNF25.4-307.1-10	Zn	307.1	25.4	10	> 15%
VLNF25.4-307.1-25	-	307.1	25.4	25	> 20%
VLNF25.4-310-10	-	310	25.4	10	> 15%
VLNF25.4-313-10	Hg	313.0	25.4	10	> 15%
VLNF25.4-313-25	-	313.0	25.4	25	> 20%
VLNF25.4-320-10	-	320.0	25.4	10	> 25%
VLNF25.4-326.1-3	Cd	326.1	25.4	3	> 15%
VLNF25.4-326.1-10	-	326.1	25.4	10	> 25%

VLNF25.4-326.1-25	-	326.1	25.4	25	> 25%
VLNF25.4-330-10	-	330.0	25.4	10	> 25%
VLNF25.4-334-10	Hg	334.0	25.4	10	> 25%
VLNF25.4-337.1-3	N2	337.1	25.4	3	> 20%
VLNF25.4-337.1-10	-	337.1	25.4	10	> 25%
VLNF25.4-340-8	-	340.0	25.4	8	> 35%
VLNF25.4-340-10	-	340.0	25.4	10	> 25%
VLNF25.4-340-25	-	340.0	25.4	25	> 25%
VLNF25.4-350-10	-	350.0	25.4	10	> 25%
VLNF25.4-350-25	-	350.0	25.4	25	> 25%
VLNF25.4-350-40	-	350.0	25.4	40	> 25%
VLNF25.4-355-10	YAG(3)	355	25.4	10	> 20%
VLNF25.4-355-40	-	355	25.4	40	> 25%
VLNF25.4-360-10	-	360	25.4	10	> 25%
VLNF25.4-365-5	Hg	365.0	25.4	5	> 20%
VLNF25.4-365-10	-	365.0	25.4	10	> 25%
VLNF25.4-365-25	-	365.0	25.4	25	> 25%
VLNF25.4-370-10	-	370.0	25.4	10	> 25%
VLNF25.4-380-12	-	380	25.4	12	> 35%
VLNF25.4-390-10	-	390	25.4	10	> 35%

Visible Light Series Ordering Guide

Item No.	Light Source	CWL (nm)	Diameter (mm)	FWHM (nm)	Peak Transmission (%)
VLNF25.4-400-10	-	400.0	25.4	10	> 50%
VLNF25.4-400-15	-	400.0	25.4	15	> 50%
VLNF25.4-400-20	-	400.0	25.4	20	> 50%
VLNF25.4-400-40	-	400.0	25.4	40	> 50%
VLNF25.4-400-70	-	400.0	25.4	70	> 50%
VLNF25.4-404.7-5	Hg	404.7	25.4	5	> 50%
VLNF25.4-404.7-10	-	404.7	25.4	10	> 50%
VLNF25.4-410-10	-	410.0	25.4	10	> 50%

VLNF25.4-415-10	-	415.0	25.4	10	> 50%
VLNF25.4-420-10	-	420.0	25.4	10	> 50%
VLNF25.4-430-10	-	430.0	25.4	10	> 50%
VLNF25.4-435.8-5	Hg	435.8	25.4	5	> 50%
VLNF25.4-435.8-10	-	435.8	25.4	10	> 50%
VLNF25.4-440-10	-	440.0	25.4	10	> 50%
VLNF25.4-441.6-1	He-Cd	441.6	25.4	1	> 50%
VLNF25.4-441.6-3	-	441.6	25.4	3	> 50%
VLNF25.4-441.6-10	-	441.6	25.4	10	> 50%
VLNF25.4-450-10	-	450.0	25.4	10	> 50%
VLNF25.4-450-20	-	450.0	25.4	20	> 50%
VLNF25.4-450-40	-	450.0	25.4	40	> 50%
VLNF25.4-450-80	-	450.0	25.4	80	> 50%
VLNF25.4-455.5-10	Cs	455.5	25.4	10	> 50%
VLNF25.4-457.9-1	Ar Ion	457.9	25.4	1	> 50%
VLNF25.4-457.9-3	-	457.9	25.4	3	> 50%
VLNF25.4-457.9-10	-	457.9	25.4	10	> 50%
VLNF25.4-460-10	-	460.0	25.4	10	> 50%
VLNF25.4-470-10	-	470.0	25.4	10	> 50%
VLNF25.4-480-10	-	480.0	25.4	10	> 50%
VLNF25.4-486.1-10	H	486.1	25.4	10	> 50%
VLNF25.4-488-2	Ar Ion	488.0	25.4	2	> 50%
VLNF25.4-488-3	-	488.0	25.4	3	> 50%
VLNF25.4-488-10	-	488.0	25.4	10	> 50%
VLNF25.4-490-10	-	490.0	25.4	10	> 55%
VLNF25.4-415-10	-	415.0	25.4	10	> 50%
VLNF25.4-420-10	-	420.0	25.4	10	> 50%
VLNF25.4-430-10	-	430.0	25.4	10	> 50%
VLNF25.4-435.8-5	Hg	435.8	25.4	5	> 50%

VLNF25.4-435.8-10	-	435.8	25.4	10	> 50%
VLNF25.4-440-10	-	440.0	25.4	10	> 50%
VLNF25.4-441.6-1	He-Cd	441.6	25.4	1	> 50%
VLNF25.4-441.6-3	-	441.6	25.4	3	> 50%
VLNF25.4-441.6-10	-	441.6	25.4	10	> 50%
VLNF25.4-450-10	-	450.0	25.4	10	> 50%
VLNF25.4-450-20	-	450.0	25.4	20	> 50%
VLNF25.4-450-40	-	450.0	25.4	40	> 50%
VLNF25.4-450-80	-	450.0	25.4	80	> 50%
VLNF25.4-455.5-10	Cs	455.5	25.4	10	> 50%
VLNF25.4-457.9-1	Ar Ion	457.9	25.4	1	> 50%
VLNF25.4-457.9-3	-	457.9	25.4	3	> 50%
VLNF25.4-457.9-10	-	457.9	25.4	10	> 50%
VLNF25.4-460-10	-	460.0	25.4	10	> 50%
VLNF25.4-470-10	-	470.0	25.4	10	> 50%
VLNF25.4-480-10	-	480.0	25.4	10	> 50%
VLNF25.4-486.1-10	H	486.1	25.4	10	> 50%
VLNF25.4-488-2	Ar Ion	488.0	25.4	2	> 50%
VLNF25.4-488-3	-	488.0	25.4	3	> 50%
VLNF25.4-488-10	-	488.0	25.4	10	> 50%
VLNF25.4-490-10	-	490.0	25.4	10	> 55%
VLNF25.4-500-10	-	500.0	25.4	10	> 55%
VLNF25.4-500-20	-	500.0	25.4	20	> 55%
VLNF25.4-500-40	-	500.0	25.4	40	> 55%
VLNF25.4-500-80	-	500.0	25.4	80	> 70%
VLNF25.4-508-10	-	508.0	25.4	10	> 55%
VLNF25.4-510-10	-	510.0	25.4	10	> 55%
VLNF25.4-514.5-1	Ar Ion	514.5	25.4	1	> 45%
VLNF25.4-514.5-3	-	514.5	25.4	3	> 50%
VLNF25.4-514.5-10	-	514.5	25.4	10	> 55%

VLNF25.4-520-10	-	520.0	25.4	10	> 55%
VLNF25.4-523-10	-	523.0	25.4	10	> 55%
VLNF25.4-530-10	-	530.0	25.4	10	> 55%
VLNF25.4-532-1	Nd:YAG	532.0	25.4	1	> 45%
VLNF25.4-532-3	-	532.0	25.4	3	> 50%
VLNF25.4-532-10	-	532.0	25.4	10	> 55%
VLNF25.4-535-10	Ti	535.0	25.4	10	> 55%
VLNF25.4-540-10	-	540.0	25.4	10	> 55%
VLNF25.4-544-10	-	544.0	25.4	10	> 55%
VLNF25.4-546.1-5	Hg	546.1	25.4	5	> 55%
VLNF25.4-546.1-10	-	546.1	25.4	10	> 55%
VLNF25.4-550-10	-	550.0	25.4	10	> 55%
VLNF25.4-550-20	-	550.0	25.4	20	> 55%
VLNF25.4-550-40	-	550.0	25.4	40	> 55%
VLNF25.4-550-80	-	550.0	25.4	80	> 70%
VLNF25.4-560-10	-	560.0	25.4	10	> 55%
VLNF25.4-570-10	-	570.0	25.4	10	> 55%
VLNF25.4-577-5	Hg	577.0	25.4	5	> 50%
VLNF25.4-577-10	-	577.0	25.4	10	> 55%
VLNF25.4-580-10	-	580.0	25.4	10	> 55%
VLNF25.4-589.3-10	Na	589.3	25.4	10	> 55%
VLNF25.4-590-10	-	590.0	25.4	10	> 55%
VLNF25.4-600-10	-	600.0	25.4	10	> 55%
VLNF25.4-600-40	-	600.0	25.4	40	> 55%
VLNF25.4-600-80	-	600.0	25.4	80	> 80%
VLNF25.4-610-10	-	610.0	25.4	10	> 55%
VLNF25.4-620-10	-	620.0	25.4	10	> 55%
VLNF25.4-630-10	-	630.0	25.4	10	> 55%
VLNF25.4-632.8-1	He-Ne	632.8	25.4	1	> 50%

VLNF25.4-632.8-3	-	632.8	25.4	3	> 50%
VLNF25.4-632.8-10	-	632.8	25.4	10	> 55%
VLNF25.4-636.2-10	Zn	636.2	25.4	10	> 60%
VLNF25.4-640-10	-	640.0	25.4	10	> 60%
VLNF25.4-647.1-2	Kr	647.1	25.4	2	> 50%
VLNF25.4-647.1-3	-	647.1	25.4	3	> 50%
VLNF25.4-647.1-10	-	647.1	25.4	10	> 60%
VLNF25.4-650-10	-	650.0	25.4	10	> 55%
VLNF25.4-650-20	-	650.0	25.4	20	> 55%
VLNF25.4-650-40	-	650.0	25.4	40	> 50%
VLNF25.4-650-80	-	650.0	25.4	80	> 70%
VLNF25.4-656.3-1	H	656.3	25.4	1	> 45%
VLNF25.4-656.3-3	-	656.3	25.4	3	> 50%
VLNF25.4-656.3-10	-	656.3	25.4	10	> 55%
VLNF25.4-660-10	-	660.0	25.4	10	> 55%
VLNF25.4-670-10	Diode	670.0	25.4	10	> 55%
VLNF25.4-671-10	-	671.0	25.4	10	> 55%
VLNF25.4-675-20	-	675.0	25.4	20	> 55%
VLNF25.4-680-10	-	680.0	25.4	10	> 55%
VLNF25.4-690-10	-	690.0	25.4	10	> 55%
VLNF25.4-694.3-1	Ruby	694.3	25.4	1	> 45%
VLNF25.4-694.3-3	-	694.3	25.4	3	> 50%
VLNF25.4-694.3-10	-	694.3	25.4	10	> 55%
VLNF25.4-700-10	-	700.0	25.4	10	> 55%
VLNF25.4-700-20	-	700.0	25.4	20	> 55%
VLNF25.4-700-40	-	700.0	25.4	40	> 50%
VLNF25.4-700-80	-	700.0	25.4	80	> 65%

NIR & SWIR Series Ordering Guide

Item No.	Light Source	CWL (nm)	Diameter (mm)	FWHM (nm)	Peak Transmission (%)
----------	--------------	----------	---------------	-----------	-----------------------

VLNF25.4-710-10	-	710.0	25.4	10	> 55%
VLNF25.4-720-10	-	720.0	25.4	10	> 55%
VLNF25.4-730-10	-	730.0	25.4	10	> 50%
VLNF25.4-750-10	-	750.0	25.4	10	> 50%
VLNF25.4-750-20	-	750.0	25.4	20	> 50%
VLNF25.4-750-40	-	750.0	25.4	40	> 40%
VLNF25.4-750-100	-	750.0	25.4	100	> 65%
VLNF25.4-760-10	-	760.0	25.4	10	> 50%
VLNF25.4-766.5-10	K (Potassium)	766.5	25.4	10	> 50%
VLNF25.4-770-10	-	770.0	25.4	10	> 50%
VLNF25.4-780-10	Diode	780.0	25.4	10	> 50%
VLNF25.4-780-20	-	780.0	25.4	20	> 50%
VLNF25.4-790-10	-	790.0	25.4	10	> 50%
VLNF25.4-794.7-10	Rb (Rubidium)	794.7	25.4	10	> 50%
VLNF25.4-800-10	-	800.0	25.4	10	> 50%
VLNF25.4-810-10	Diode	810.0	25.4	10	> 50%
VLNF25.4-810-20	-	810.0	25.4	20	> 50%
VLNF25.4-820-10	-	820.0	25.4	10	> 50%
VLNF25.4-830-10	Diode	830.0	25.4	10	> 50%
VLNF25.4-830-20	-	830.0	25.4	20	> 50%
VLNF25.4-840-10	-	840.0	25.4	10	> 50%
VLNF25.4-850-10	-	850.0	25.4	10	> 50%
VLNF25.4-850-20	-	850.0	25.4	20	> 50%
VLNF25.4-850-40	Diode	850.0	25.4	40	> 50%
VLNF25.4-850-100	-	850.0	25.4	100	> 65%
VLNF25.4-860-10	-	860.0	25.4	10	> 50%
VLNF25.4-870-10	-	870.0	25.4	10	> 50%
VLNF25.4-880-10	-	880.0	25.4	10	> 50%
VLNF25.4-890-10	-	890.0	25.4	10	> 50%

VLNF25.4-900-10	-	900.0	25.4	10	> 50%
VLNF25.4-900-20	DPSS	900.0	25.4	20	> 50%
VLNF25.4-900-40	-	900.0	25.4	40	> 50%
VLNF25.4-900-100	-	900.0	25.4	100	> 60%
VLNF25.4-905-1	GaAs	905.0	25.4	1	> 45%
VLNF25.4-905-3	-	905.0	25.4	3	> 45%
VLNF25.4-905-10	-	905.0	25.4	10	> 50%
VLNF25.4-910-10	-	910.0	25.4	10	> 50%
VLNF25.4-920-10	-	920.0	25.4	10	> 50%
VLNF25.4-930-10	-	930.0	25.4	10	> 50%
VLNF25.4-940-10	-	940.0	25.4	10	> 50%
VLNF25.4-950-10	-	950.0	25.4	10	> 50%
VLNF25.4-950-20	-	950.0	25.4	20	> 50%
VLNF25.4-950-40	-	950.0	25.4	40	> 50%
VLNF25.4-950-100	-	950.0	25.4	100	> 60%
VLNF25.4-960-10	-	960.0	25.4	10	> 50%
VLNF25.4-970-10	-	970.0	25.4	10	> 50%
VLNF25.4-980-10	Diode	980.0	25.4	10	> 50%
VLNF25.4-990-10	-	990.0	25.4	10	> 50%
VLNF25.4-1000-10	-	1000.0	25.4	10	> 50%
VLNF25.4-1000-20	-	1000.0	25.4	20	> 50%
VLNF25.4-1000-40	-	1000.0	25.4	40	> 50%
VLNF25.4-1000-100	-	1000.0	25.4	100	> 60%
VLNF25.4-1014-10	-	1014	25.4	10	> 45%
VLNF25.4-1046-10	-	1046	25.4	10	> 45%
VLNF25.4-1050-10	-	1050	25.4	10	> 45%
VLNF25.4-1064-1	Nd:YAG	1064	25.4	1	> 40%
VLNF25.4-1064-3	-	1064	25.4	3	> 45%
VLNF25.4-1064-10	-	1064	25.4	10	> 40%
VLNF25.4-1150-10	-	1150	25.4	10	> 40%

VLNF25.4-1200-10	-	1200	25.4	10	> 35%
VLNF25.4-1250-10	-	1250	25.4	10	> 35%
VLNF25.4-1300-10	Diode	1300	25.4	10	> 35%
VLNF25.4-1300-20	-	1300	25.4	20	> 35%
VLNF25.4-1350-10	-	1350	25.4	10	> 35%
VLNF25.4-1400-10	-	1400	25.4	10	> 35%
VLNF25.4-1500-10	Diode	1500	25.4	10	> 30%
VLNF25.4-1500-20	-	1500	25.4	20	> 30%
VLNF25.4-1535-10	-	1535	25.4	10	> 90%
VLNF25.4-1550-10	Diode	1550	25.4	10	> 30%
VLNF25.4-1550-20	-	1550	25.4	20	> 30%
VLNF25.4-1550-10-H	-	1550	25.4	10	> 90%
VLNF25.4-1570-10	-	1570	25.4	10	> 90%

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	Diameter (mm)	FWHM (nm)	CWL (nm)	Peak Transmission (%)
VLNF25.4-355-10	25.4	10	355	> 20%
VLNF25.4-488-10	25.4	10	488	> 50%
VLNF25.4-532-10	25.4	10	532	> 55%
VLNF25.4-632.8-10	25.4	10	632.8	> 55%
VLNF25.4-1064-10	25.4	10	1064	> 40%
VLNF25.4-1550-10	25.4	10	1550	> 30%

 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.

[Get a Quote](#)



Get Expert Advice
+658099 5547 (WhatsApp)



Visit Us
www.venuslabtech.com