

Fiber-Coupled Laser Sources

VL Quick-Connect Type Fiber-Coupled Laser

Precise Coverage + Flexible Integration

- Multi-spectral Coverage and Scenario Adaptability of Precise Power Gradient
- Stability Breakthroughs Enabled by CTP Packaging Technology
- High Compatibility and Customization Capability
- Industrial-Grade Reliability Design



One Platform Many Possibilities

Contact Us sales@venuslabtech.com

Get a Quote



Get Expert Advice
+65 8099 5547 (WhatsApp)



Visit Us
www.venuslabtech.com

Overview

Introduction:

Venuslab Quick-Connect Type Fiber-Coupled Laser is a modular laser solution positioned for "low-to-medium power and multi-spectral adaptability". Through systematic wavelength coverage and power gradient design, it has built a complete laser output system from ultraviolet to near-infrared. This series includes over 30 core models, with a wavelength range covering 405nm (near-ultraviolet) to 1064nm (near-infrared) and power levels distributed in a stepped manner from 5mW to 1000mW. All models adopt multi-mode fiber (MF) output and FP cavity structure design, making them suitable for the differentiated needs of monochromatic lasers in multiple scenarios such as scientific research experiments, industrial testing, and biomedical applications.

Features:

- Multimode Fiber (MF) output + FP cavity structure + CTP packaging
- Wavelength range coverage 405nm (near-ultraviolet) to 1064nm (near-infrared)
- High stability and long service life
- Multi-dimensional adaptation reduces integration barriers
 - Unified pin definition simplifies circuit integration

Specifications

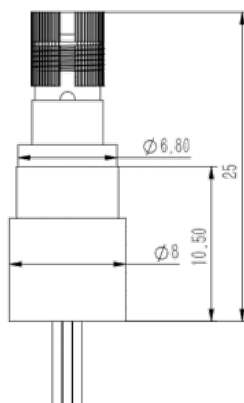
Common Parameter Specification Table

Parameter Category	Parameter Name	Symbol	Unit	Parameter Value/Requirement
Optical Common Params	Spectral Width		nm	2.0
Optical Common Params	Wavelength Temperature Coefficient	-	nm/	0.3
Fiber Common Params	Adapted Fiber Core Diameter	-	μm	25, 40, 50, 60 (small core diameter)
Fiber Common Params	Fiber Length	-	m	1
Fiber Common Params	Connector Type	-	-	FC/SMA905/ST/2.5 Ferrule (optional)
Structure & Lifetime Params	Package Type	-	-	Coaxial Package
Structure & Lifetime Params	Laser Lifetime (Long-term Reliability)	-	Hour	10000
Safety & Interface Params	Laser Safety Class	-	-	Class 4 Laser Product (protection required)
Safety & Interface Params	Pin Definition	-	-	Pin 1=LD+, Pin 2=Empty, Pin 3=LD-
Application & Function Params	Core Technical Architecture	-	-	Multi-Mode Fiber (MF) Output + FP Cavity Structure

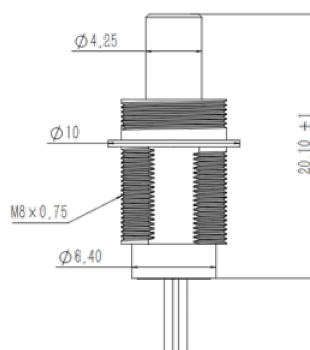
Dimensions

Package Dimension Drawing

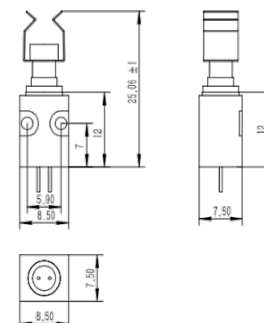
A-1 : 8*10.5 (mm)



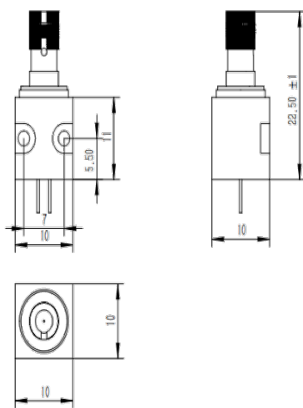
A-2 : 6.4/FC (mm)



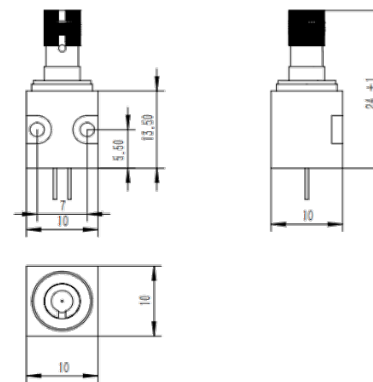
A-3 : 8.5-7.5-12 (mm)



A-4 : 10*10*11 (mm)



A-5 : 10-10-13.5 (mm)



Selection Table

Pluggable Laser Selection Table

Wavelength	Power (mW)	Package Type	Remarks (mm)
405	100	A-1、 A-3、 A-4、 A-5	A-1 : 8*10.5、 A-2 : 6.4/FC、 A-3 : 8.5-7.5-12、 A-4 : 10*10*11、 A-5 : 10-10-13.5
	300		
	500		
450	60	A-1	
	1000		
488	60	A-1	
505	80	A-1	
520	60	A-1	
	100	A-1	
	200	A-1	
638	130	A-1	
	150	A-1	
660	100	A-1、 A-2	
670	5	A-1	
685	50	A-1	
785	60	A-1	
808	100	A-1	
830	100	A-1	
850	100	A-1	
905	100	A-1	
940	100	A-1	
980	100	A-1	
1064	50	A-1	

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

VLFL-405-100-A-1	40-70	5.0-6.0	100	150-180	400-405-410	A-1: 8×10.5
VLFL-405-100-A-3	40-70	5.0-6.0	100	150-180	400-405-410	A-3: 8.5-7.5-12
VLFL-405-100-A-4	40-70	5.0-6.0	100	150-180	400-405-410	A-4: 10×10×11
VLFL-405-100-A-5	40-70	5.0-6.0	100	150-180	400-405-410	A-5: 10-10-13.5
VLFL-405-300-A-1	140-200	4.5-5.5	300	250-400	400-405-410	A-1: 8×10.5
VLFL-405-300-A-3	140-200	4.5-5.5	300	250-400	400-405-410	A-3: 8.5-7.5-12
VLFL-405-300-A-4	140-200	4.5-5.5	300	250-400	400-405-410	A-4: 10×10×11
VLFL-405-300-A-5	140-200	4.5-5.5	300	250-400	400-405-410	A-5: 10-10-13.5
VLFL-405-500-A-1	125-225	5.0-6.0	500	650-750	400-405-410	A-1: 8×10.5
VLFL-405-500-A-3	125-225	5.0-6.0	500	650-750	400-405-410	A-3: 8.5-7.5-12
VLFL-405-500-A-4	125-225	5.0-6.0	500	650-750	400-405-410	A-4: 10×10×11
VLFL-405-500-A-5	125-225	5.0-6.0	500	650-750	400-405-410	A-5: 10-10-13.5
VLFL-450-60-A-1	22	5.3	60	110	445-450-455	A-1: 8×10.5
VLFL-450-1000-A-1	22	5.3	1000	110	445-450-455	A-1: 8×10.5
VLFL-488-60-A-1	22	5.3	60	110	483-488-493	A-1: 8×10.5

VLFL-505-80-A-1	60	6.5	80	140	500-505-510	A-1: 8x10.5
VLFL-520-60-A-1	60-90	6.6-7.7	60	160-180	515-520-525	A-1: 8x10.5
VLFL-520-100-A-1	70-95	6.7-8.0	100	160-260	515-520-525	A-1: 8x10.5
VLFL-520-200-A-1	80	6.5	200	240	515-520-525	A-1: 8x10.5
VLFL-638-130-A-1	35-55	2.2-3.0	130	200-220	633-638-643	A-1: 8x10.5
VLFL-638-150-A-1	35-55	2.2-3.0	150	200-220	633-638-643	A-1: 8x10.5
VLFL-660-100-A-1	50-65	2.5-3.0	100	155-165	655-660-665	A-1: 8x10.5
VLFL-660-100-A-2	50-65	2.5-3.0	100	155-165	655-660-665	A-2: 6.4/FC
VLFL-670-5-A-1	140-200	4.5-5.5	5	250-400	665-670-675	A-1: 8x10.5
VLFL-685-50-A-1	35-60	2.7-3.0	50	100-140	680-685-690	A-1: 8x10.5
VLFL-785-60-A-1	30-50	2.0-2.5	60	120-160	780-785-790	A-1: 8x10.5
VLFL-808-100-A-1	35-45	3	100	160-170	803-808-813	A-1: 8x10.5
VLFL-830-100-A-1	55-80	1.8-2.6	100	170-240	825-830-835	A-1: 8x10.5
VLFL-850-100-A-1	55-80	1.8-2.7	100	180-240	845-850-855	A-1: 8x10.5
VLFL-905-100-A-1	25-50	1.9-2.4	100	130-170	900-905-910	A-1: 8x10.5
VLFL-940-100-A-1	20-40	1.8-2.4	100	270-320	935-940-945	A-1: 8x10.5
VLFL-980-100-A-1	40-50	1.0-2.1	100	165-195	975-980-985	A-1: 8x10.5
VLFL-1064-50-A-1	15-18	1.8-2.0	50	120-135	1060-1064-1070	A-1: 8x10.5

 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
+65 8099 5547 (WhatsApp)



Visit Us
www.venuslabtech.com