

Laser Systems

Three-wavelength multimode fiber white light laser system

Professional white light laser: 3-wavelength integrated, customizable, compact.

- 3-wavelength integration for multi-band coordination.
- Fiber parameters are highly customizable, with strong scene adaptability
- Software control + high stability, with convenient operation and reliable results
- Compact integration + wide environmental adaptability, flexible deployment



One Platform Many Possibilities

Contact Us sales@venuslabtech.com

Get a Quote



Get Expert Advice
+658099 5547 (WhatsApp)



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www.venuslabtech.com

Overview

Introduction:

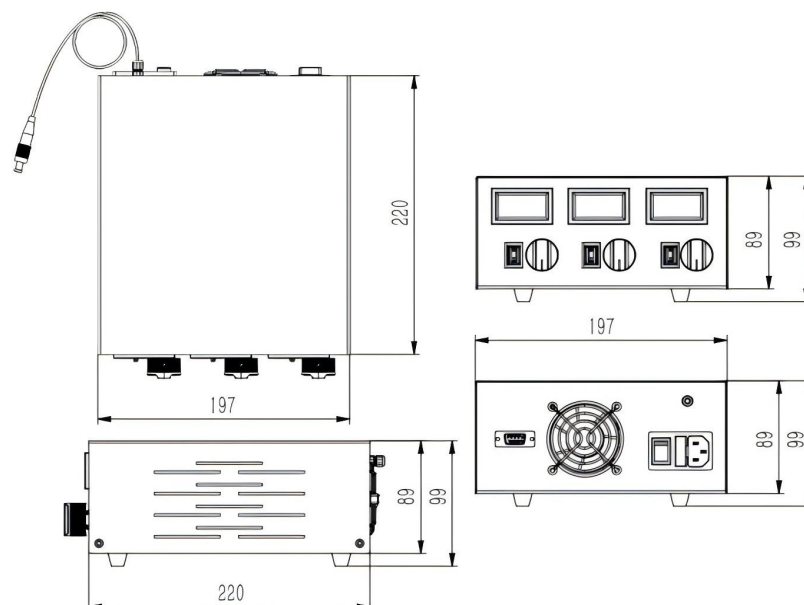
It is a three-wavelength integrated white light fiber-coupled laser system developed by Venuslab. Through an integrated design, it integrates laser modules of three wavelength bands: 450nm (blue light), 520nm (green light), and 638nm (red light) into the same chassis, forming a complete laser solution capable of outputting composite white light. In terms of core performance, the single-channel output power of this product is 30mW, the center wavelength accuracy is controlled within $\pm 3\text{nm}$ ($450\pm 3\text{nm}$, $520\pm 3\text{nm}$, $638\pm 3\text{nm}$), and the spectral width is uniformly 3nm.

All adopt FP (Fabry-Perot) type lasers to ensure the stability and consistency of lasers in each wavelength band. In terms of fiber configuration, multimode fiber transmission is used. The fiber core diameter and numerical aperture (0.22/0.37/0.5) support customization, the fiber length is 1m, and the interface is compatible with industrial standard types such as FC/SMA905/SC/ST, which can flexibly adapt to connection requirements in different scenarios.

Features:

- Precision controllable
- Firm output
- Flexible customization
- Interface compatibility
- Automation control
- Compact and portable
- Environmental tolerance

Dimension:



Specifications

Common Parameter Specification Table

Spectral Width	3 nm
Fiber Core Diameter	Customizable
Numerical Aperture (NA)	0.22, 0.37, 0.5 (Customizable)
Fiber Type	Multimode Fiber (MF)
Fiber Length	1 m
Operating Mode	CW (Standard)
Remote Control	RS232 Software Control
Stability (2-hour Continuous Operation)	2%
Cooling Method	Air Cooling

Control Mode	Automatic Current Control (ACC)
Operating Temperature	+10°C ~ +40°C
Storage Temperature	-20°C ~ +60°C
Warm-up Time	< 5 Minutes
AC (Standard)	90V ~ 240VAC, 50 ~ 60Hz
DC (Optional)	+12V
Collimating Lens	Optional

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	Output power	Central Wavelength	Fiber optic types	Fiber optic interface
VLFL-450+520+638-MF	30 mW per channel	(450、 520、 638) ±3 nm	Multimodal	FC/SMA905/SC/ST

 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](#)



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