

Laser Systems

VLFL-405 Series Fiber-Coupled Laser Systems

Full-power, multi-scenario integrated laser system

- Fully integrated system design, plug-and-play
- High-precision performance control with excellent stability
- Strong scene adaptability and flexible customization
- Long lifespan and low maintenance, with low usage cost



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

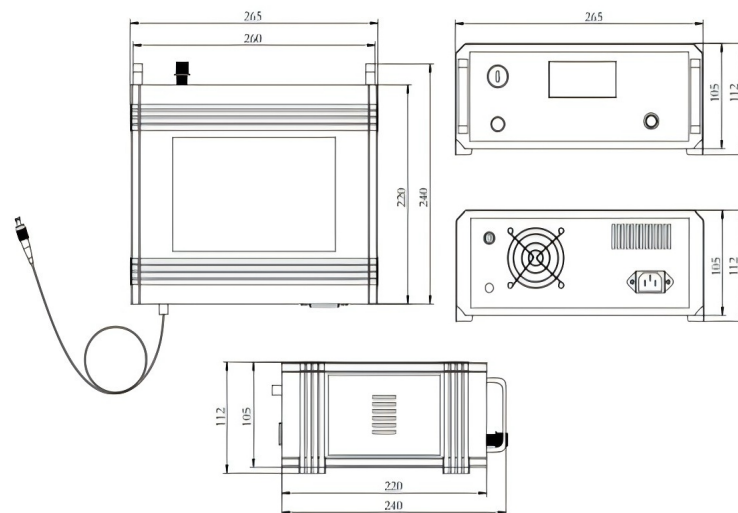
Introduction:

Developed by Venuslab, the 405nm central wavelength fiber-coupled laser system adopts a highly integrated design (integrating laser module, dedicated modulation module, high-precision driving power supply, and air-cooled refrigeration unit), uniformly adapts to the A-1 type chassis (size 265mm×240mm×112mm), supports AC 90V~240V (50~60Hz) or DC +12V power supply, has a preheating time of <5 minutes, an operating temperature range of +10 ~ +40 , and a storage temperature range of -20 ~ +60 . The core control technology is Automatic Current Control (ACC), which can realize three working modes: CW (continuous wave), 0~20KHz TTL modulation, and 0~5V Analog modulation. The stability during 2-hour continuous operation is 3%, and collimating lenses are optional for all, with customized services (power, size, connector, etc.) provided.

Features:

- High stability
- High beam quality
- High signal-to-noise ratio (SNR)
- Customized services

Dimension:



Specifications

Parameter details table

Parameter Category	Parameter Item	Common Specification Description
Optical Parameters	Central Wavelength	Min. 400nm, Typical Value 405nm, Max. 410nm
Optical Parameters	Laser Type	FP (Fabry-Perot) Laser
Control Data	Operating Modes	1. Standard CW (Continuous Wave) Mode; 2. 0~20KHz TTL Modulation Mode; 3. 0~5V Analog Modulation Mode
Control Data	Control Mode	Automatic Current Control (ACC)
Control Data	2-Hour Continuous Operation Stability	Min. 2%, Max. 3%
Control Data	Cooling Method	Air Cooling
Operating Environment	Operating Temperature	+10 ~ +40
Operating Environment	Storage Temperature	-20 ~ +60
Operating Environment	Warm-Up Time	< 5 Minutes
Power Supply	Standard AC Power Supply	90V ~ 240VAC, Frequency 50 ~ 60Hz
Power Supply	Optional DC Power Supply	+12V

Chassis & Accessories	Chassis Model	Type A-1
Chassis & Accessories	Chassis Dimension (Unit: mm)	265mm×240mm×112mm
Chassis & Accessories	Optional Accessory	Collimating Lens
Basic Product Attributes	Core Function	Integrated with laser module, dedicated modulation module, and high-precision driving power supply
Basic Product Attributes	Maintenance Feature	Easy to operate, maintenance-free, long service life

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 TypeFiber	Optic Interface
VLFL-405-MF-130	130	400~410	Multi-Mode Fiber	FC/SMA905/SC/ST
VLFL-405-MF-300	300	400~410	Multi-Mode Fiber	FC/SMA905/SC/ST
VLFL-405-MF-500	500	400~410	Multi-Mode Fiber	FC/SMA905/SC/ST
VLFL-405-MF-800	800	400~410	Multi-Mode Fiber	FC/SMA905/SC/ST
VLFL-405-MF-2000	2000	400~410	Multi-Mode Fiber	FC/SMA905/SC/ST
VLFL-405-PM-80	80	400~410	Polarization-Maintaining Fiber	FC/APC
VLFL-405-SF-80	80	400~410	Single-Mode Fiber	FC/PC

 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 moves cience forward—faster and smarter.

[Get a Quote](#)



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