

Motion Controller

VL-MC Series-200

A cost-effective multi-axis motion control core for small and medium-sized automation scenarios

- Dual-axis 2 MHz, XY linear/arc completed in one go
- USB plug-and-play without driver, ready to use in 10 minutes
- Hardware compensation, $\pm 1 \mu\text{m}$ repeat positioning accuracy
- 1000 segments of offline cache, two-line API for arc activation
- 8 OUT / 4 IN, emergency stop/laser synchronization



One Platform Many Possibilities

Contact Us sales@venuslabtech.com

Get a Quote



Get Expert Advice
+65 8099 5547



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www.venuslabtech.com

Overview

"Dual-Axis Budget Speed Box" – VL-MC Series-200

The VL-MC Series-200 is a USB plug-and-play dual-axis motion controller that drives two stepper or servo motors at up to 2 MHz. Hardware backlash compensation and native XY linear/circular interpolation deliver $\pm 1 \mu\text{m}$ repeatability. Store 1,000 move segments on-board for stand-alone operation, or launch an arc with a two-line API call under Windows XP/7. Eight programmable outputs and four inputs handle emergency stop, laser gate, etc., in real time. Compact and budget-friendly, it turns any bench into a precision two-axis stage in ten minutes.

Features of the VL-MC Series-200

- 2-axis stepper/servo control
- Panel + IR + rocker triple operation
- 8 OUT / 4 IN software I/O
- RS232 & RS485 host ports
- XY linear / arc interpolation

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	Number of control axes	Handwheel/Joystick
VLMC200-100B	1	None
VLMC200-200B	2	None
VLMC200-101B	1	Have
VLMC200-201B	2	Have

 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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