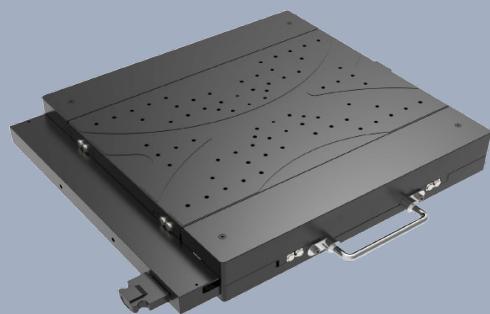


Piezo Stages

VL PZT Linear Motor

Cross-scale precision positioning platform

- Cross-Scale Motion: Beyond piezo micron stroke; 18 – 90mm cm-scale travel with 10nm ultra-high resolution.
- Zero-Drift Locking: Piezo friction drive, power-off self-locking, no thermal drift or jitter.



One Platform Many Possibilities

Contact Us sales@venuslabtech.com

Get a Quote



Get Expert Advice
+65 8099 5547



Visit Us
www.venuslabtech.com

Overview

Nanometer Precision, Millimeter Range

The Venus Nano™ piezoelectric motor series redefines precision movement. It abandons the complex structure of traditional motor + lead screw and adopts direct-drive piezoelectric motor technology, achieving a perfect integration of large stroke and nanoscale stepping in an extremely compact volume. With features such as power-off self-locking, low heat generation, and no magnetic interference, it is an ideal choice for precision optical adjustment, semiconductor inspection, and micro-nano processing fields.

Applications

- Semiconductor: Wafer surface topography inspection and defect scanning.
- Microscopy: Long-distance searching and fine focusing of microscope samples.
- Photonics: Optical path delay line adjustment and fiber coupling.
- Metrology: Precision interferometry and profile analysis.

Technical Specifications

Venus Nano™ Piezo Motor Stages List

Original Ref.	Product Name	Axis	Travel	Est. Res	Feature/Note
XY Scanning					
VL-PZT-XY-250	Venus Nano™ XY Scanning Stage	XY	250 × 250 mm	50 nm	Large Area Scanning, High Speed
Linear Series					
VL-PZT-L-10	Venus Nano™ Linear Stage	X	10 mm	10 nm	Miniature Size
VL-PZT-L-25	Venus Nano™ Linear Stage	X	25 mm	10 nm	Miniature Long Travel
VL-PZT-L-13-S	Venus Nano™ Compact Stage	X	13 mm	10 nm	Compact Design
VL-PZT-L-18-S	Venus Nano™ Compact Stage	X	18 mm	10 nm	Hero Product, Self-Locking
VL-PZT-L-25-S	Venus Nano™ Compact Stage	X	25 mm	10 nm	Compact Long Travel
VL-PZT-L-10-H	Venus Nano™ High-Load Stage	X	10 mm	20 nm	Reinforced Load Capacity
VL-PZT-L-10-K	Venus Nano™ Kinematic Stage	X	10 mm	20 nm	Specialized Structure
VL-PZT-L-40-H	Venus Nano™ High-Load Stage	X	40 mm	20 nm	Reinforced, Mid-Range
VL-PZT-L-20-R	Venus Nano™ Rail Stage	X	20 mm	20 nm	Reinforced Rail Guide
VL-PZT-L-50	Venus Nano™ Standard Stage	X	50 mm	20 nm	Standard Mid-Travel
VL-PZT-L-90-T	Venus Nano™ Wide Stage	X	90 mm	20 nm	Hero Product, Wide Table
VL-PZT-L-80	Venus Nano™ Standard Stage	X	80 mm	20 nm	Long Travel
VL-PZT-L-150	Venus Nano™ Long Travel Stage	X	150 mm	50 nm	Extended Range
VL-PZT-L-200	Venus Nano™ Max Travel Stage	X	200 mm	50 nm	Ultra Long Travel
VL-PZT-L-200-HK	Venus Nano™ Heavy Duty Stage	X	200 mm	50 nm	High Load, Long Travel

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	Max Load	Travel Range	Resolution
VL-PZT-L-18-S	1.0 kg	18 mm	10 nm
VL-PZT-L-90-T	3.0 kg	90 mm	20 nm
VL-PZT-XY-250	10.0 kg	250 × 250 mm	50 nm
VL-PZT-L-200	5.0 kg	200 mm	50 nm

 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



Visit Us
www.venuslabtech.com