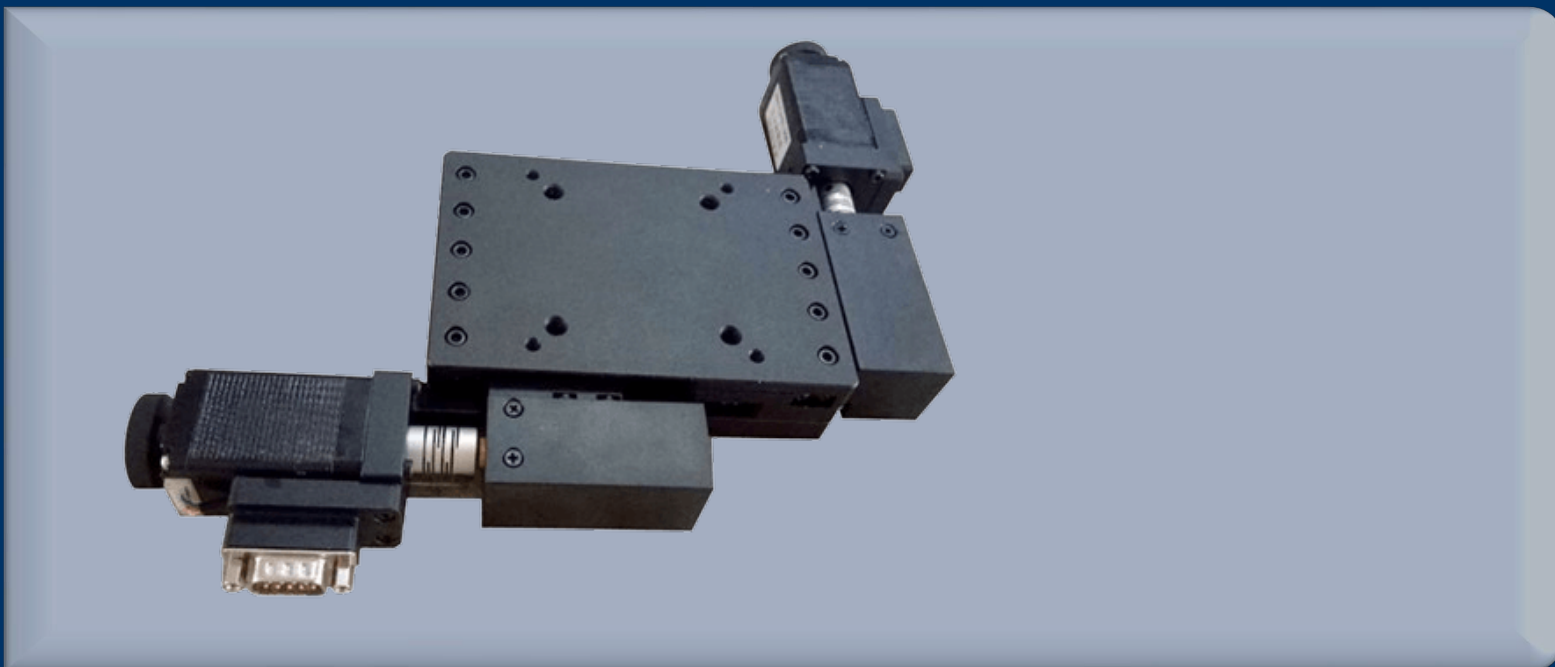


## MI-XY Stage

### VL Integrated XY Stage

#### Integrated Low-Profile Precision 2D Stage

- Integrated Design: No stacking; shared base, lower CG, no perpendicularity errors.
- Rigid Guiding: Cross-roller guides,  $\mu\text{m}$  smoothness under load/lateral force.



## One Platform Many Possibilities

Contact Us [sales@venuslabtech.com](mailto:sales@venuslabtech.com)

Get a Quote



Get Expert Advice  
+658099 5547 ( WhatsApp )



Visit Us  
[www.venuslabtech.com](http://www.venuslabtech.com)

## Overview

### Ultimate Compactness, Native Orthogonality

The VL-XY series is a planar motion solution tailor-made for space-constrained scenarios. It addresses the pain points of traditional stacked stages, which are "too thick and too wobbly", and ensures the perfect orthogonality of the X and Y axes through an integrated molding process. Whether it is for micro handheld devices or industrial heavy-load detection, it can provide the most stable two-dimensional precise positioning with the minimum space occupation.

### Applications

- Microscopy: Automated whole-slide/dish scanning.
- Precision Alignment: Chip packaging, fiber array coupling.
- Vision Inspection: Display scratch detection, PCB defect inspection.
- Laser Machining: UV laser marking and micro-cutting.

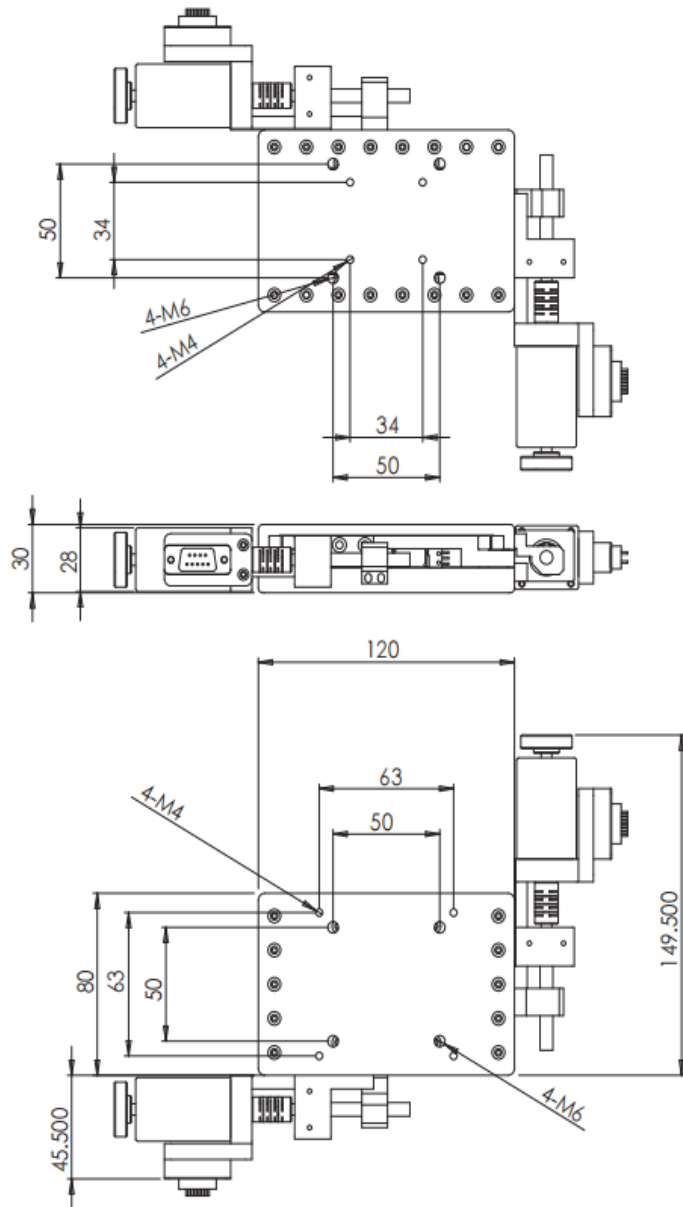
## Technical Specifications

### Technical Specifications

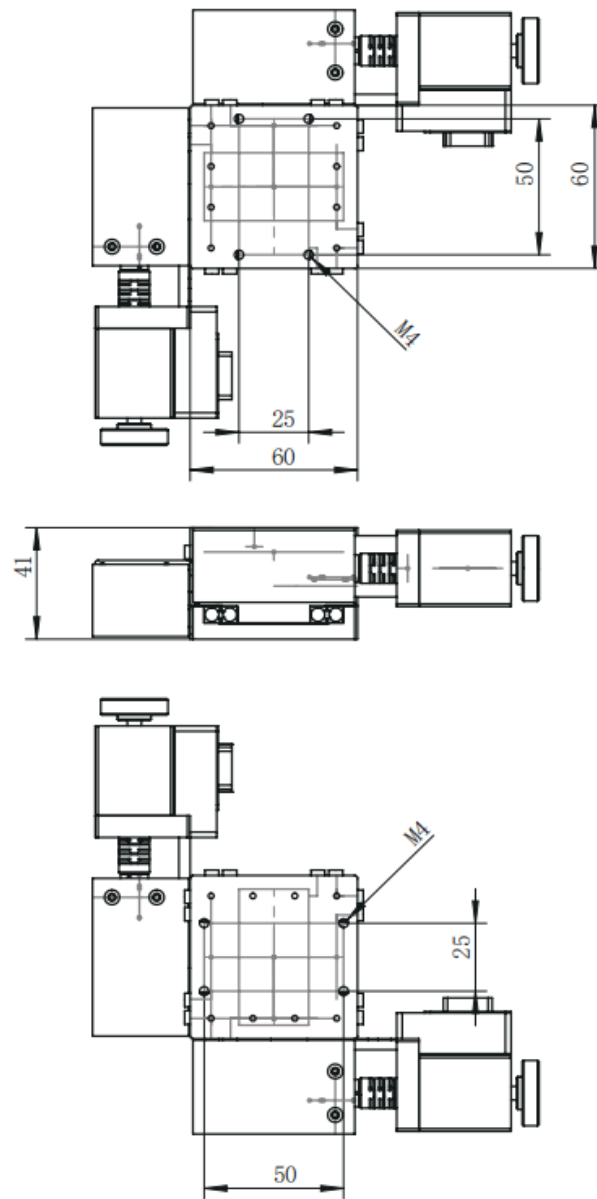
Parameter	VL-XY120-09	VL-XY60-20	VL-XY155-50	VL-XY95-20	VL-XY155-06	VL-XY300-100	VL-XY300-170	VL-XY260-150
Travel	9 mm	20 mm	50 mm	20 mm	6 mm	100 mm	170 mm	150 mm
Table Size	120 x 80 mm	60 x 60 mm	155 x 155 mm	95 x 95 mm	155 x 155 mm	300 x 300 mm	300 x 300 mm	260 x 260 mm
Drive	Fine Screw (0.5)	Ball Screw	Ball Screw (1.0)	Fine Screw (0.5)	Ball Screw (1.0)	Ball Screw (4.0)	Ball Screw (4.0)	Precision Screw
Guide	Cross Roller	Cross Roller	Cross Roller	Cross Roller	Cross Roller	Cross Roller	Cross Roller	Cross Roller
Load	10 kg	5 kg	10 kg	10 kg	10 kg	10 kg	60 kg	10 kg
Max Speed	3 mm/sec	5 mm/sec	6 mm/sec	6 mm/sec	6 mm/sec	6 mm/sec	25 mm/sec	6 mm/sec
Resolution	5 $\mu$ m / 0.25 $\mu$ m	5 $\mu$ m / 0.25 $\mu$ m	5 $\mu$ m / 0.25 $\mu$ m	5 $\mu$ m / 0.25 $\mu$ m	5 $\mu$ m / 0.25 $\mu$ m	5 $\mu$ m / 0.25 $\mu$ m	20 $\mu$ m / 1 $\mu$ m	5 $\mu$ m / 0.25 $\mu$ m
Repeatability	1.5 $\mu$ m	1.5 $\mu$ m	1.5 $\mu$ m	1.5 $\mu$ m	1.5 $\mu$ m	1.5 $\mu$ m	2 $\mu$ m	1.5 $\mu$ m
Weight	1.5 kg	1.2 kg	3.2 kg	3.2 kg	3.2 kg	3.2 kg	10.3 kg	5.2 kg

## Mechanical Dimensions

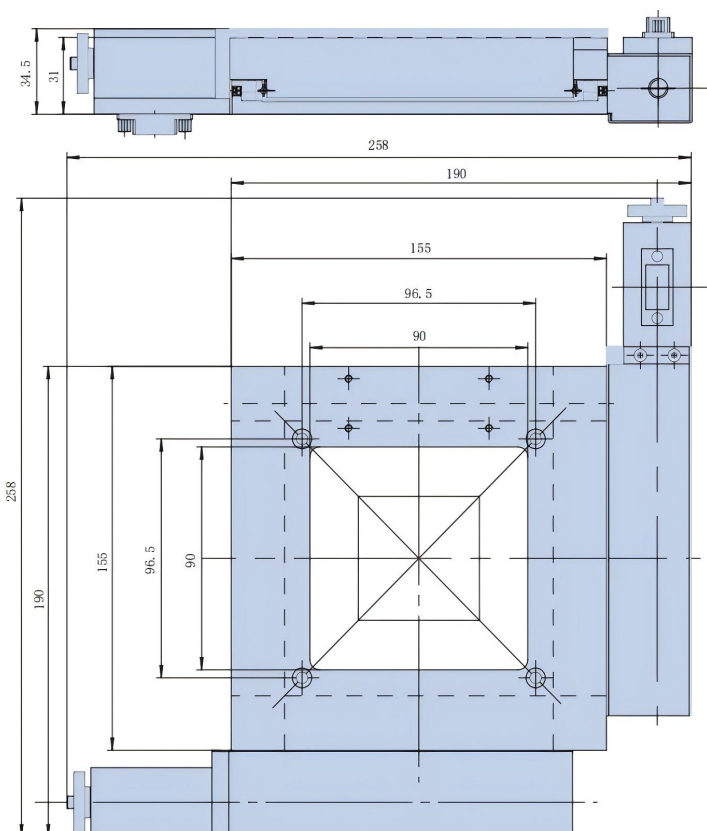
VL-XY120-09



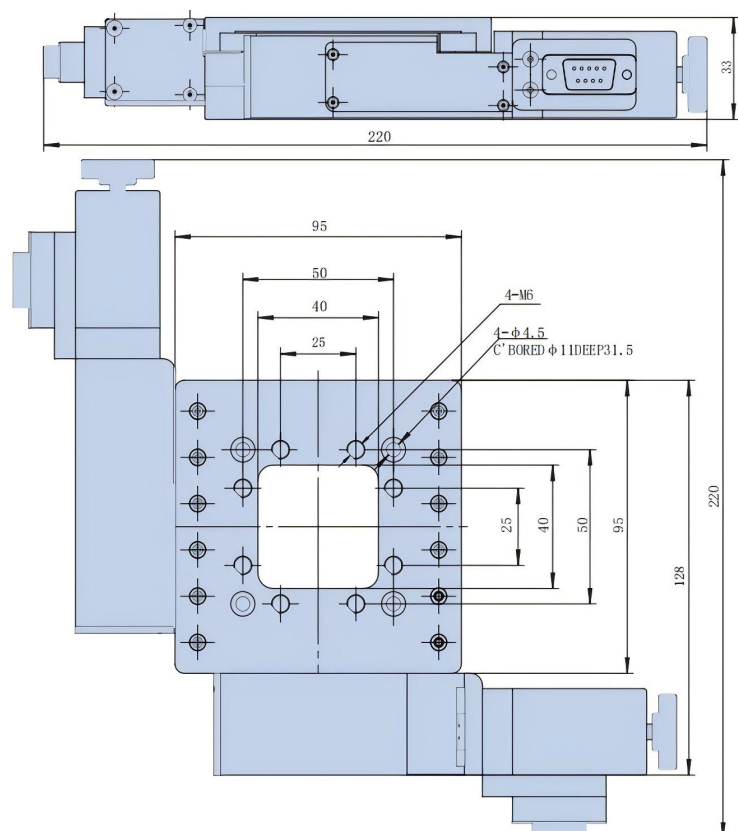
VL-XY60-20



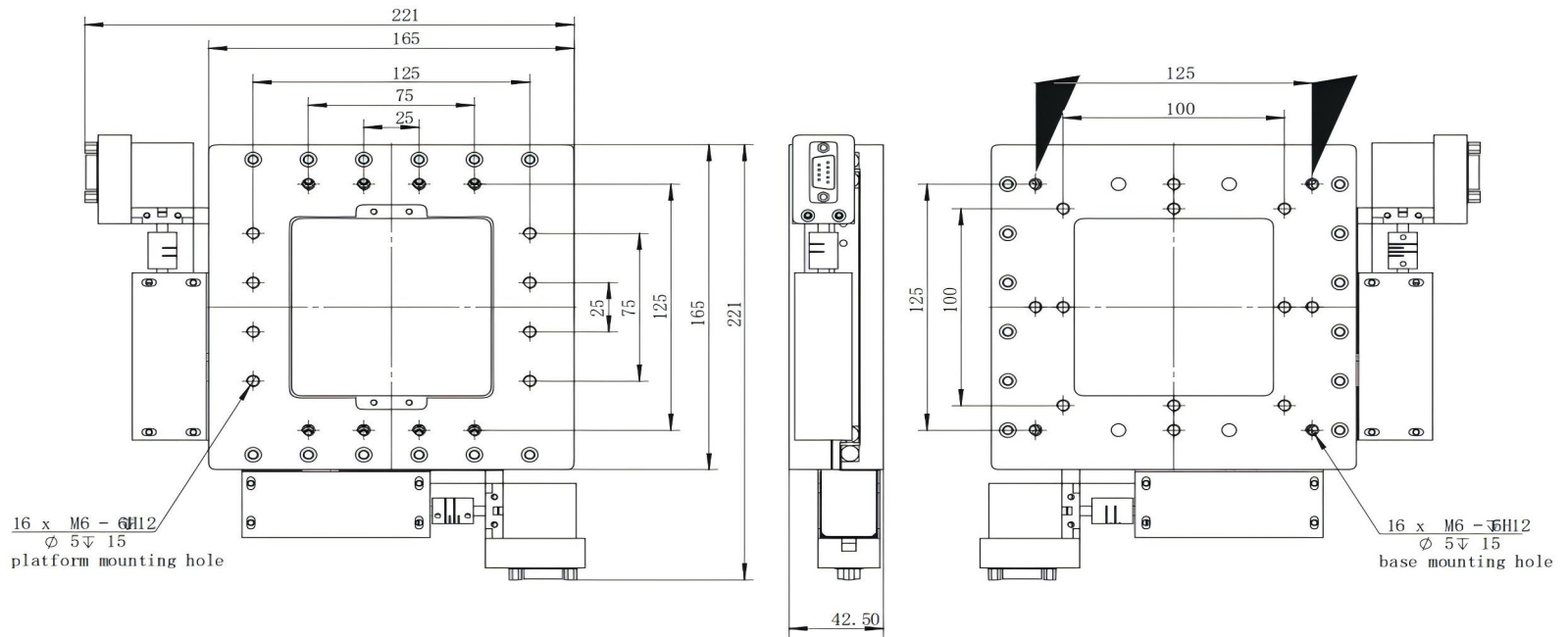
VL-XY155-50



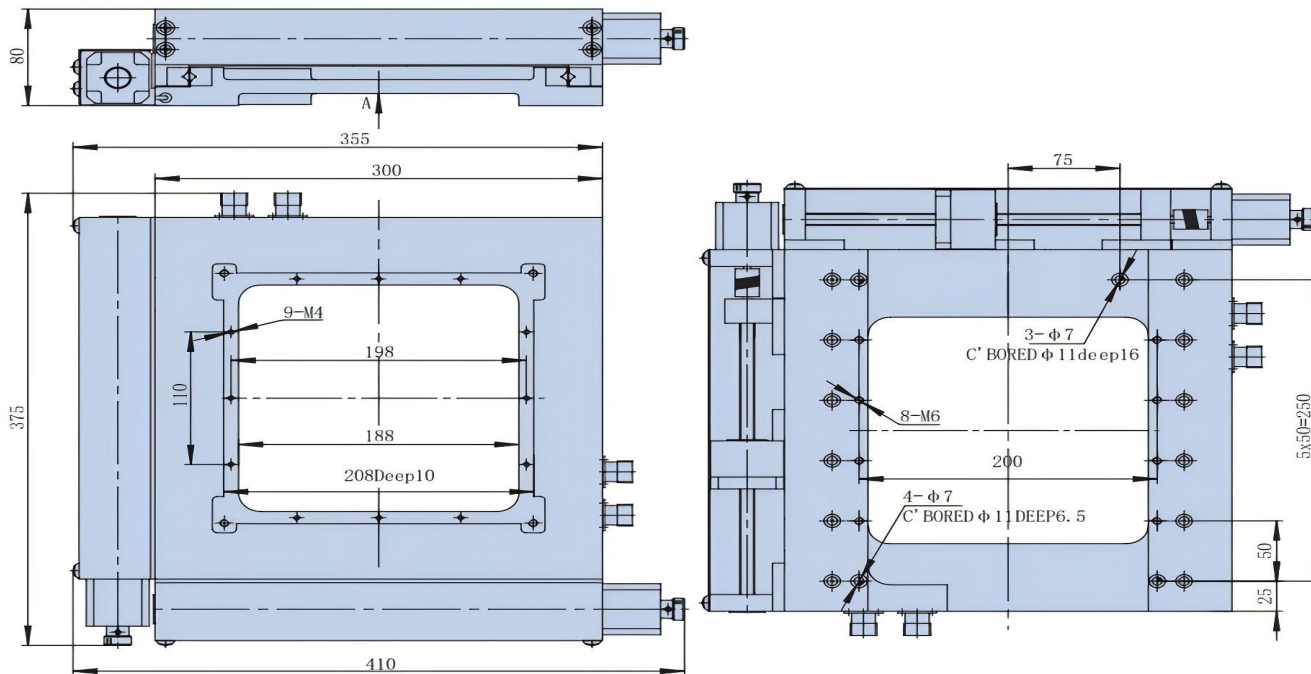
VL-XY95-20



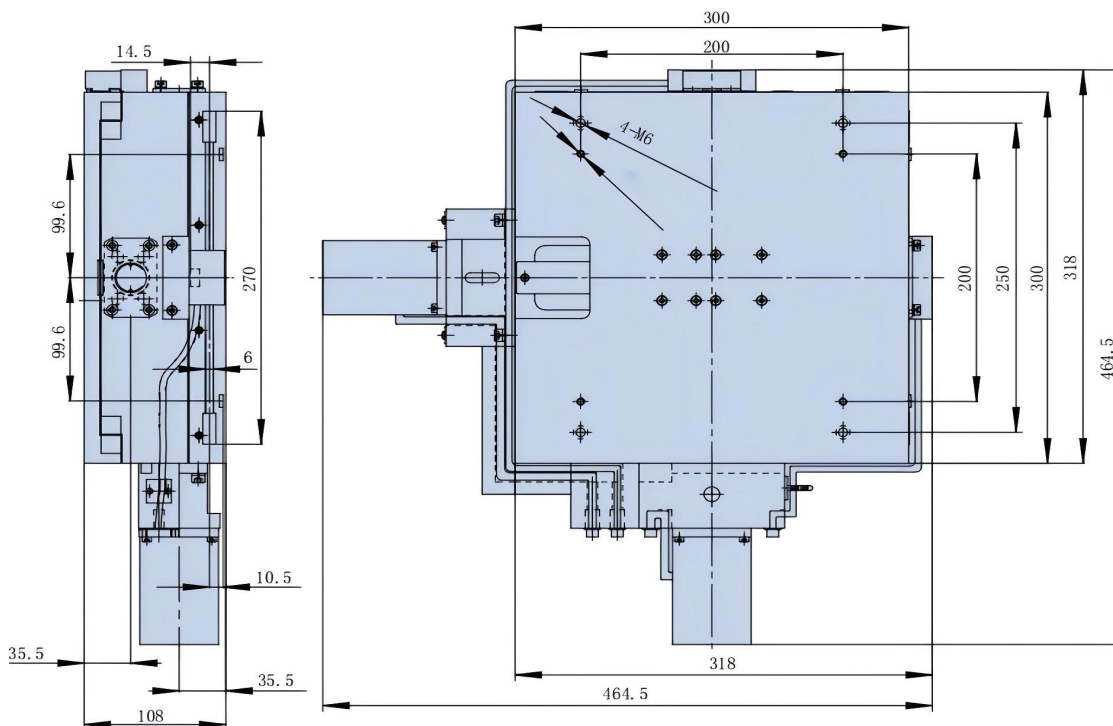
VL-XY300-170



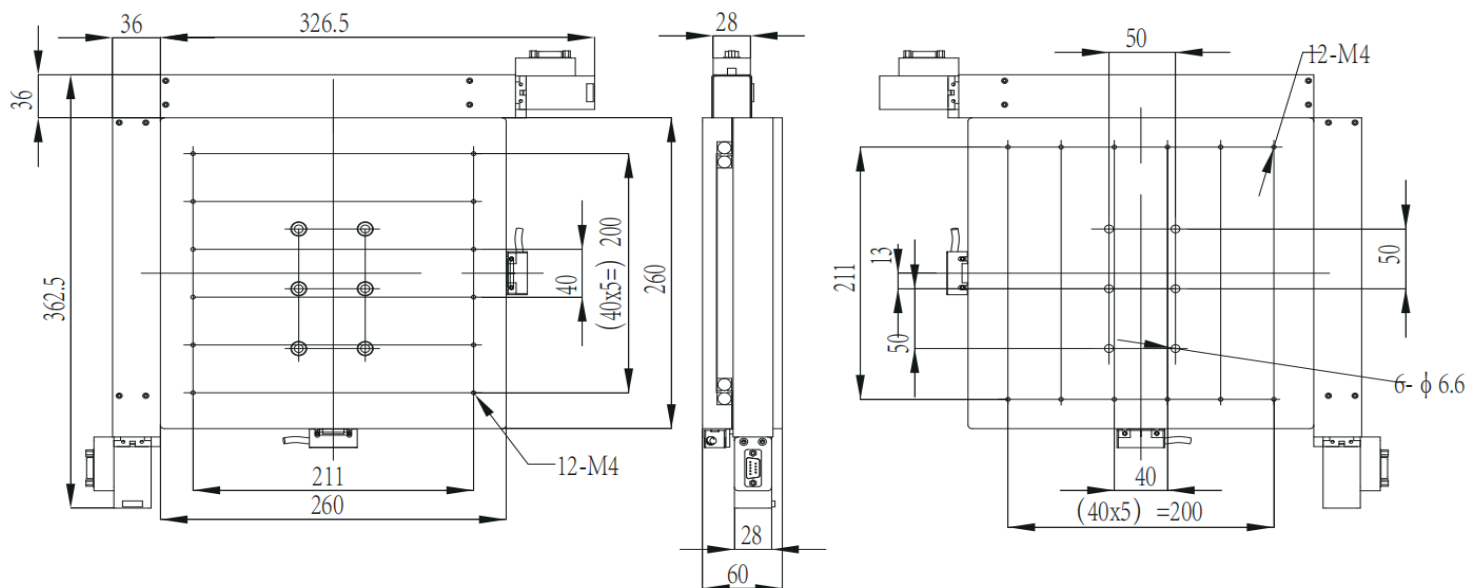
VL-XY155-06



VL-XY300-100



VL-XY260-150



## 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	Travel Range	Load Capacity	Table Size	Weight	Resolution	Max Speed
VL-XY60-20	20 mm	5 kg	60 x 60 mm	1.2 kg	5µm / 0.25µm	5 mm/sec
VL-XY95-20	20 mm	10 kg	95 x 95 mm	3.2 kg	5µm / 0.25µm	6 mm/sec
VL-XY300-170	170 mm	60 kg	300 x 300 mm	10.3 kg	20µm / 1µm	25 mm/sec

 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  
+658099 5547 ( WhatsApp )



Visit Us  
[www.venuslabtech.com](http://www.venuslabtech.com)