

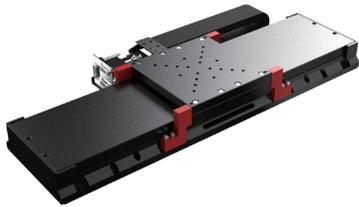
## High precision positioning platform

Customized platform product catalog

Suitable for industries such as semiconductor/photovoltaic/lithium battery/precision machine tool/medical equipment, etc

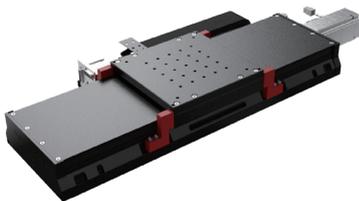
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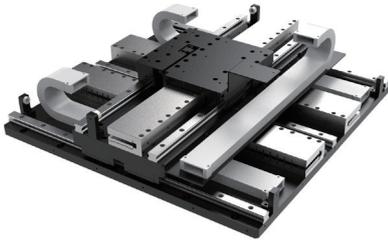
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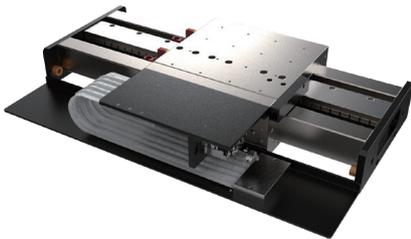
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PLAM385-300

PLAM385-400

PLAM385-500

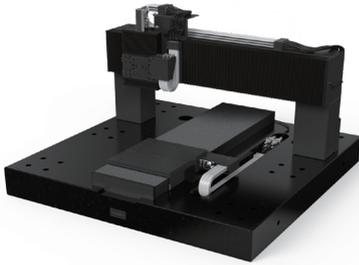
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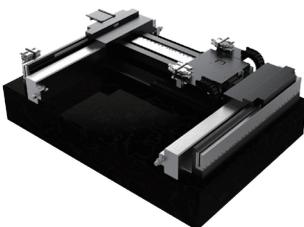


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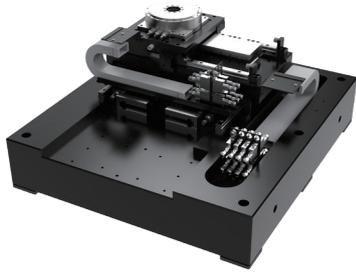
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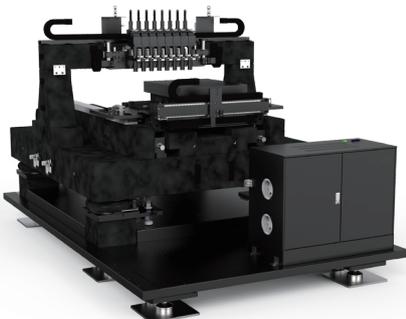


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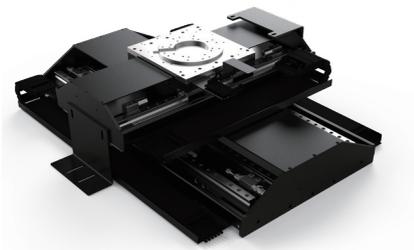
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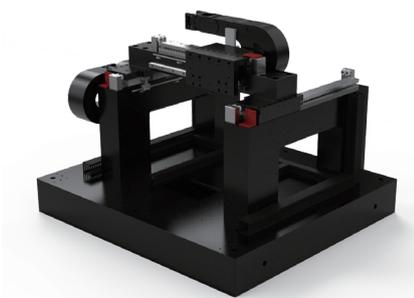
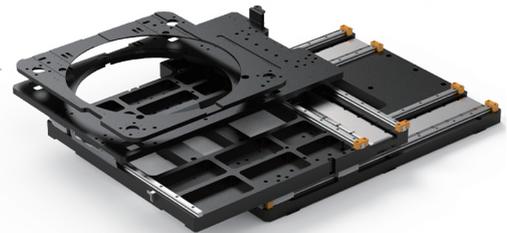


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# COMPANY PROFILE



TOKK Robot (Suzhou) Co., Ltd. is headquartered in Xiangcheng District, Suzhou City. Currently, it has three major research and development centers in Kunshan, Suzhou, and Shenzhen, with manufacturing bases in both Suzhou and Kunshan. The production area is over 30000 square meters, and there are dozens of R&D personnel with more than ten years of R&D experience.

At the same time, it integrates Lingchen Technology's years of motion control experience. The company focuses on the research and development, production, and sales of linear motors, precision platforms, transmission modules, electric cylinders, KK modules, servo presses, and other products. Targeting the high-end equipment manufacturing industry as the market, we have experts in mechanical, electronic automation, computer, industrial automation and other research fields, as well as young and promising scientific and technological personnel; Equipped with CNC machining centers, CNC milling machines, grinders, wire cutting machines, grinding machines and other equipment; Can meet the requirements of standardized mass production.

TOKK Robotics (Suzhou) Co., Ltd.'s products mainly serve major industries such as 3C, lithium batteries, photovoltaics, panels, and semiconductors. They are widely used in dispensing, handling, scanning, and moving, and can meet various customer needs and application scenarios.

The company will adhere to the principles of "customer achievement, win-win cooperation, craftsmanship spirit, reliability and altruism", with the mission of "becoming the preferred brand for global automation components", constantly exploring and innovating, striving to create a well-known brand with international competitiveness, and providing customers with high-quality services and support!



## **Corporate Vision**

Committed to becoming the first/preferred supplier of components in the global automation field



## **corporate values**

We provide customers with diversified, customized, and high-quality services!



## **service tenet**

The second line serves the first line, and everyone serves the customers.



# Single-axis air-bearing stage

## Model Naming Rules

PAM215LS	-	100	-	L1	-	AS
Platform model		trip		Cable Management		Feedback options
		unit: mm		Single side drag chain plate		VPP1 volt sine analog input
		100	200	Single drag chain	L1	AS
		300	400	Bilateral drag chain plate		High precision VPP1 volt sine analog input
		500		Double drag chain	L2	1nm resolution digital TTL signal input
						5nm resolution digital TTL signal input
						10nm resolution digital TTL signal input
						20nm resolution digital TTL signal input
						50nm resolution digital TTL signal input

## Application scenarios

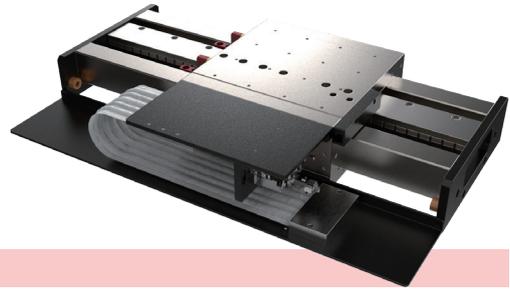
Large optical lens inspection, wafer defect detection in the semiconductor field, precision manufacturing and packaging, etc

## Product Introduction

Product Features	<ul style="list-style-type: none"> <li>·High performance direct drive air flotation platform with high dynamic performance</li> <li>·Adopting air surrounding preloading and non-contact design</li> <li>·Tailored for high-performance scanning and detection applications</li> <li>·Nano level positioning accuracy air floating platform driven by linear motor</li> <li>·Can be used as a single axis or combined with other axes to form a multi axis system</li> <li>·Very suitable for applications with heavy loads</li> </ul>	Structural characteristics	<ul style="list-style-type: none"> <li>·Utilizing air elastic potential energy as a supporting guide rail to achieve zero friction between the slide rail and the sliding table</li> <li>·Excellent dynamic performance and positioning accuracy</li> <li>·Positive and negative pressure design of air flotation platform</li> <li>·Large volume loads with uneven distribution of gravity on air floating guide rails</li> <li>Application can better ensure the normal air gap of the air guide rail</li> </ul>
Customization	Larger itinerary can be customized		

# Air floating single axis platform

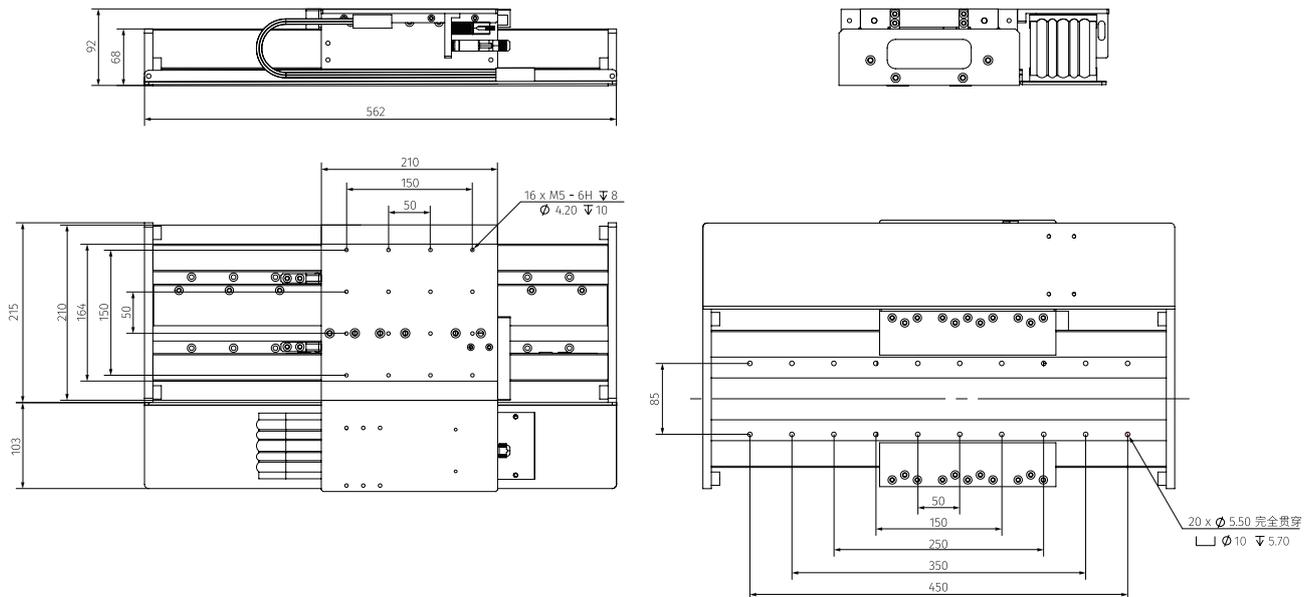
## PLAM215 series



### Parameter Table

Platform model	PLAM215-100	PLAM215-200	PLAM215-300	PLAM215-400	PLAM215-500
Effective stroke	100mm	200mm	300mm	400mm	500mm
Positioning accuracy	±0.2 μm	±0.3 μm	±0.3 μm	±0.4 μm	±0.5 μm
Bi directional repetitive positioning accuracy	±0.1 μm	±0.1 μm	±0.2 μm	±0.25μm	±0.3 μm
Pitch	±1.5 arc sec	±2.5 arc sec	±3 arc sec	±4 arc sec	±5 arc sec
Yaw	±1.5 arc sec	±2.5 arc sec	±3 arc sec	±4 arc sec	±5 arc sec
Roll	±1.5 arc sec	±2.5 arc sec	±3 arc sec	±4 arc sec	±5 arc sec
Straightness	±0.5 μm	±0.6 μm	±0.75 μm	±1.5 μm	±2 μm
Flatness	±0.5 μm	±0.6 μm	±0.75 μm	±1.5 μm	±2 μm
Resolution	1nm				
Maximum acceleration	2 g				
Maximum speed	1000 mm/s				
Maximum horizontal load	35 kg				
Maximum radial load	20 kg				
Continuous thrust	78 N				
Peak thrust	432 N				
On-bottom stability	±10 nm				
Working pressure	5.5 bar (recommended dry air, filter water and oil, filter dust to below 0.5 μ m)				
Platform quality	19.1kg	21.3kg	23.5kg	25.7kg	27.9kg
Platform material	Aluminium				
Mean time between failures	25000Hours				

### Overall dimension



# Single-axis air-bearing stage

## Model Naming Rules

PAM385LS	-	100	-	L1	-	AS
Platform model		Trip		Cable Management		Feedback options
		unit: mm		Single side drag chain plate		VPP1 volt sine analog input
		100    200		Single drag chain	L1	AS
		300    400		Bilateral drag chain plate		High precision VPP1 volt sine analog input
		500		Double drag chain	L2	1nm resolution digital TTL signal input
						5nm resolution digital TTL signal input
						10nm resolution digital TTL signal input
						20nm resolution digital TTL signal input
						50nm resolution digital TTL signal input

## Application scenarios

Large optical lens inspection, wafer defect detection in the semiconductor field, precision manufacturing and packaging, etc

## Product Introduction

**Product Features**

- High performance direct drive air flotation platform with high dynamic performance
- Adopting air surrounding preloading and non-contact design
- Tailored for high-performance scanning and detection applications
- Nano level positioning accuracy air floating platform driven by linear motor
- Can be used as a single axis or combined with other axes to form a multi axis system
- Very suitable for applications with heavy loads

**Structural characteristics**

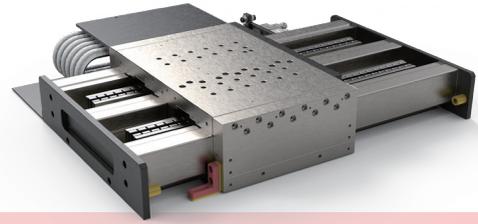
- Utilizing air elastic potential energy as a supporting guide rail to achieve zero friction between the slide rail and the sliding table
- Excellent dynamic performance and positioning accuracy
- Positive and negative pressure design of air flotation platform
- Large volume loads with uneven distribution of gravity on air floating guide rails
- Application can better ensure the normal air gap of the air guide rail

**Customization**

Larger itinerary can be customized

# Air floating single axis platform

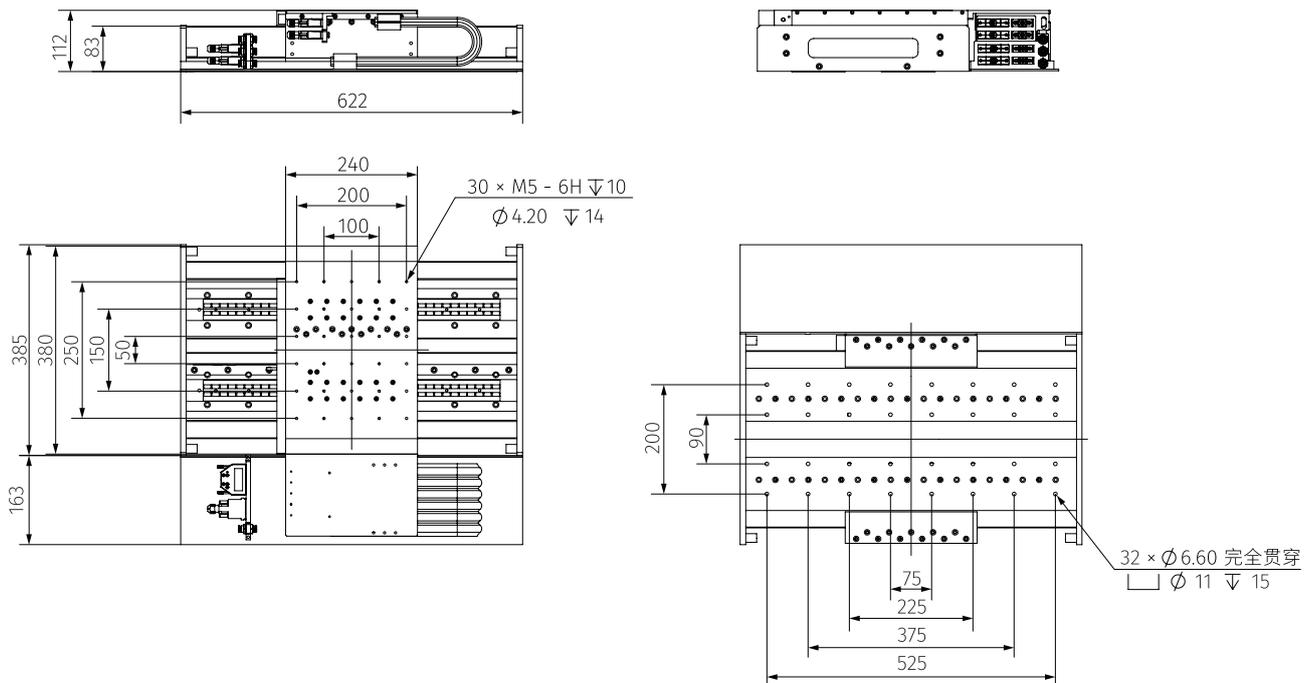
## PLAM385 series



### Parameter Table

Platform model	PLAM385-100	PLAM385-200	PLAM385-300	PLAM385-400	PLAM385-500
Effective stroke	100mm	200mm	300mm	400mm	500mm
Positioning accuracy	±0.2 μm	±0.3 μm	±0.3 μm	±0.4 μm	±0.5 μm
Bi directional repetitive positioning accuracy	±0.1 μm	±0.1 μm	±0.2 μm	±0.25μm	±0.3 μm
Pitch	±1.5 arc sec	±2.5 arc sec	±3 arc sec	±4 arc sec	±5 arc sec
Yaw	±1.5 arc sec	±2.5 arc sec	±3 arc sec	±4 arc sec	±5 arc sec
Roll	±1.5 arc sec	±2.5 arc sec	±3 arc sec	±4 arc sec	±5 arc sec
Straightness	±0.5 μm	±0.6 μm	±0.75 μm	±1.5 μm	±2 μm
Flatness	±0.5 μm	±0.6 μm	±0.75 μm	±1.5 μm	±2 μm
Resolution	1nm				
Maximum acceleration	2 g				
Maximum speed	1000 mm/s				
Maximum horizontal load	60 kg				
Maximum radial load	30 kg				
Continuous thrust	156 N				
Peak thrust	864 N				
On-bottom stability	±10 nm				
Working pressure	5.5 bar(Recommended dry air, filter water and oil, filter dust to below 0.5 μ m)				
Platform quality	40.9kg	46.2kg	51.5kg	56.8kg	62.1kg
Platform material	Aluminium				
Mean time between failures	25000Hours				

### External dimensions



# Superimposed air-bearing stage

## Model Naming Rules

PLAM - XY - 100 - L1 - AS

Platform model	trip	Cable Management	Feedback options	
	unit: mm	Single side drag chain plate	VPP1 volt sine analog input	AS
	100    200	Single drag chain    L1	High precision VPP1 volt sine analog input	ASH
	300    400	Bilateral drag chain plate	1nm resolution digital TTL signal input	TTLO01
	500	Double drag chain    L2	5nm resolution digital TTL signal input	TTLO05
			10nm resolution digital TTL signal input	TTLO10
			20nm resolution digital TTL signal input	TTLO20
			50nm resolution digital TTL signal input	TTLO50

## Application scenarios

Large optical lens inspection, wafer defect detection in the semiconductor field, precision manufacturing and packaging, etc

## Product Introduction

**Product Features**

- High performance direct drive air flotation platform with high dynamic performance
- Adopting air surrounding preloading and non-contact design
- Tailored for high-performance scanning and detection applications
- Nano level positioning accuracy air floating platform driven by linear motor
- Can be used as a single axis or combined with other axes to form a multi axis system
- Very suitable for applications with heavy loads

**Structural characteristics**

- Utilizing air elastic potential energy as a supporting guide rail to achieve zero friction between the slide rail and the sliding table
- Excellent dynamic performance and positioning accuracy
- Positive and negative pressure design of air flotation platform
- Large volume loads with uneven distribution of gravity on air floating guide rails
- Application can better ensure the normal air gap of the air guide rail

**Customization**

Larger itinerary can be customized

# Overlay air flotation platform

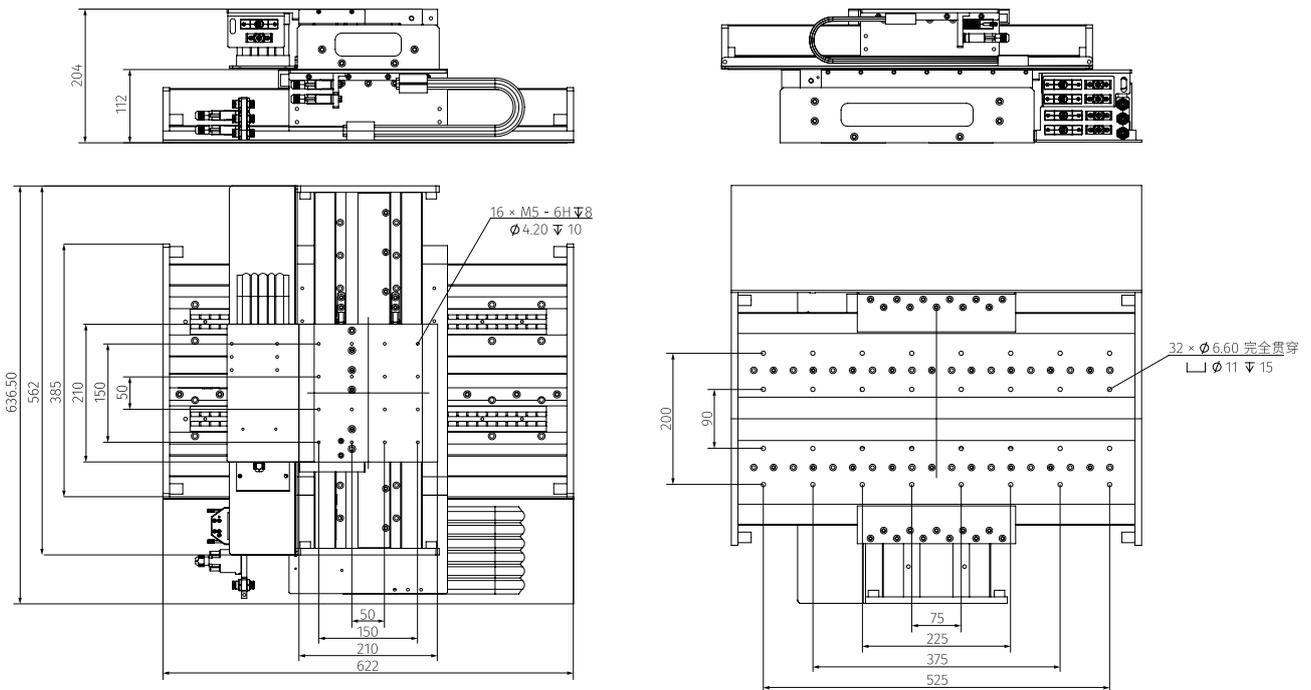
## PLAM-XY series



### Parameter Table

Platform model	PLAM-XY-300-300	
Effective stroke	300mm*300mm	
Positioning accuracy	±0.3 μm	
Bi directional repetitive positioning accuracy	±0.2 μm	
Pitch	±3 arc sec	
Yaw	±3 arc sec	
Roll	±3 arc sec	
Straightness	±1 μm	
Flatness	±1 μm	
Resolution	1nm	
Maximum acceleration	2 g	
Maximum speed	1000 mm/s	
Maximum horizontal load	60 kg	
Maximum radial load	30 kg	
Continuous thrust	Upper shaft	78 N
	lower shaft	156 N
Peak thrust	Upper shaft	432 N
	lower shaft	864 N
On-bottom stability	±10 nm	
Working pressure	5.5 bar (recommended dry air, filter water and oil, filter dust to below 0.5 μ m)	
Platform quality	75kg	
Platform material	Aluminium	
Mean time between failures	25000Hours	

### Overall dimension



# Single-axis precision linear stage

## Parameter Table

PM115LS - 100 - YT - SZ - L1

Platform model	Trip	Platform options	Feedback options	Cable Management
	unit: mm	Original factory standard installation hole position	0.1um resolution digital input	Single side drag chain plate Single drag chain
	50      100	YT	SZ	L1
	150     200	Customer customized loading platform	Analog input	Bilateral drag chain plate Double drag chain
	250     300	DT	MN	L2
	400     500			
	600     800			
	1000			

## Application scenarios

OLED cutting/PCB drilling/CNC machining/biotechnology/IC packaging/wafer inspection

## Product Introduction

**Product Features**

- High precision positioning platform for direct drive motor
- High performance and low-cost solution
- High rigidity mechanical structure
- Flexible configuration options (with different travel and width options)
- The maximum travel distance can reach 1000mm
- Excellent cable management

**Structural characteristics**

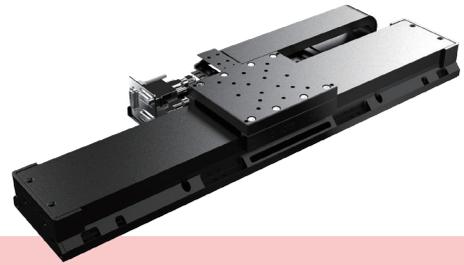
- Driven by a linear motor
- Fast speed
- Good dynamic performance
- Low friction force
- Easy to achieve precise position control
- Very suitable for applications with large travel, high precision, and high speed

**Customization**

Larger itinerary can be customized

# Single axis precision linear platform

## PM115LS specification

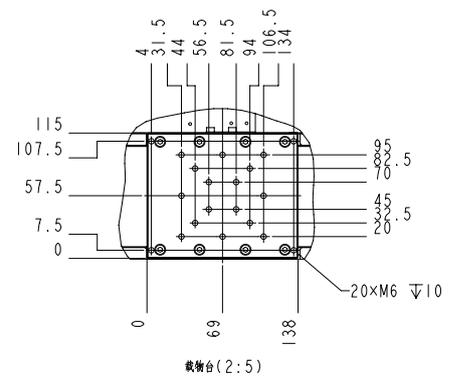
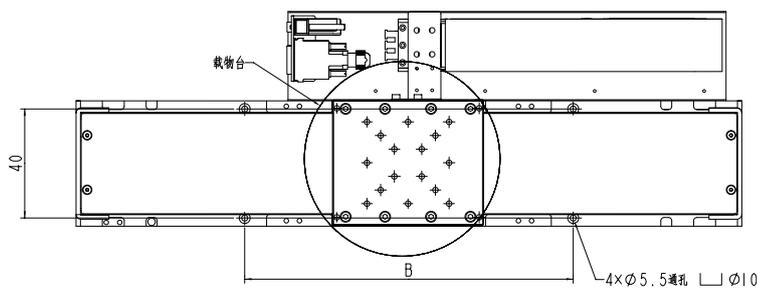
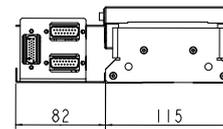
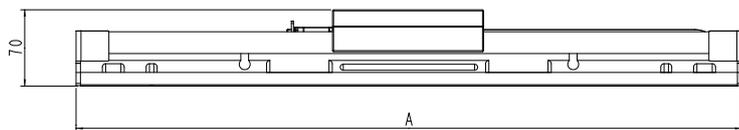


### Parameter Table

Platform model	PM115LS-50	PM115LS-100	PM115LS-150	PM115LS200	PM115LS-250	PM115LS-300
Effective stroke	50 mm	100 mm	150 mm	200 mm	250 mm	300 mm
Positioning accuracy	±0.75 μm	±1 μm	±1 μm	±1.5 μm	±1.5 μm	±1.5 μm
Bi directional repetitive positioning accuracy	±0.4 μm	±0.4 μm	±0.4 μm	±0.5 μm	±0.5 μm	±0.5 μm
Pitch	4 arc sec	6 arc sec	8 arc sec	10 arc sec	11 arc sec	12 arc sec
Yaw	4 arc sec	6 arc sec	8 arc sec	10 arc sec	11 arc sec	12 arc sec
Roll	4 arc sec	6 arc sec	8 arc sec	10 arc sec	11 arc sec	12 arc sec
Straightness	±1.5 μm	±2.5 μm	±3 μm	±4 μm	±5 μm	±6 μm
Resolution	100 nm					
Maximum acceleration	2 m/s					
Maximum speed	3 g					
Maximum horizontal load	40 KG					
Maximum radial load	40 KG					
Continuous thrust	26 N					
Peak thrust	144 N					
Minimum step quantity	75 nm					
Platform quality	5.1 kg	5.7 kg	6.2 kg	6.8 kg	7.4 kg	8.1 kg
Platform material	Aluminium					
Mean time between failures	20000 Hours					

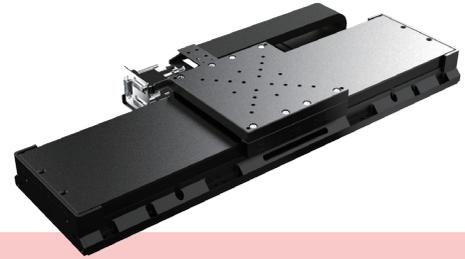
Note: The above test data was obtained from a linear amplifier in a laboratory environment, with the test point located 25mm above the center point

### Overall dimension



# Single axis precision linear platform

## PM165LS specification

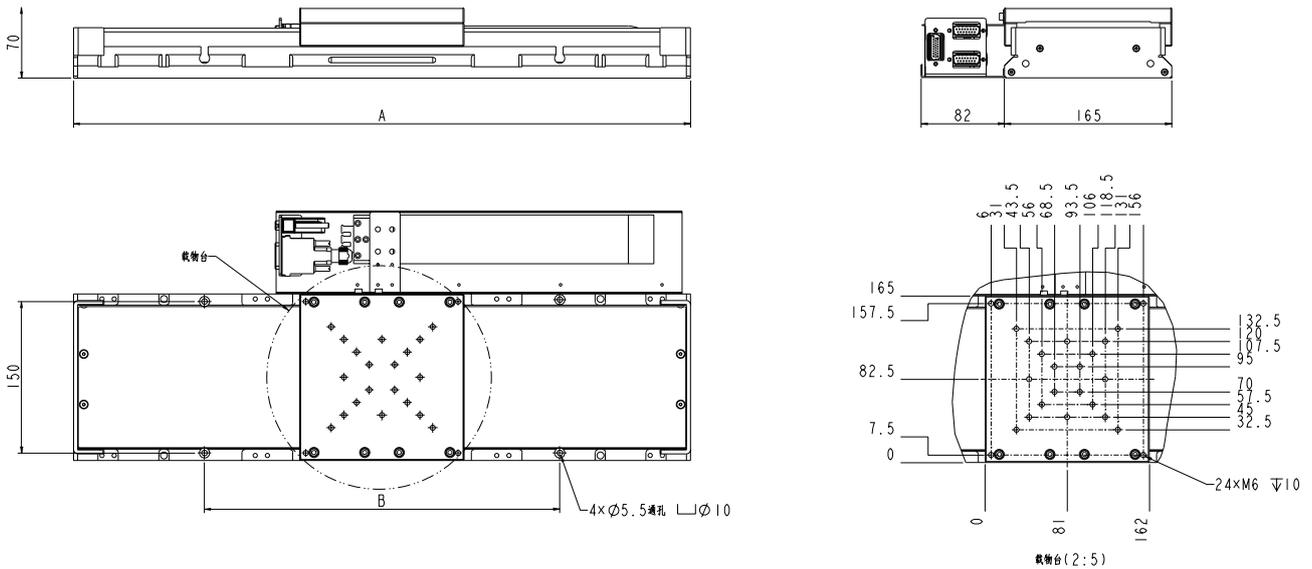


### Parameter Table

Platform model	PM165LS-100	PM165LS-200	PM165LS-300	PM165LS-400	PM165LS-500	PM165LS-600	PM165LS-800	PM165LS-1000
Effective stroke	100 mm	200 mm	300 mm	400 mm	500 mm	600 mm	700 mm	800 mm
Positioning accuracy	±1 μm	±1.5 μm	±1.5 μm	±1.5 μm	±2 μm	±2 μm	±2 μm	±2 μm
Bi directional repetitive Positioning accuracy	±0.4 μm	±0.5 μm	±0.5 μm	±0.5 μm	±0.5 μm	±0.5 μm	±0.5 μm	±0.5 μm
Pitch	6 arc sec	8.5 arc sec	12 arc sec	14.5 arc sec	16.5 arc sec	19 arc sec	21 arc sec	25 arc sec
Yaw	6 arc sec	8.5 arc sec	12 arc sec	14.5 arc sec	16.5 arc sec	19 arc sec	21 arc sec	25 arc sec
Roll	6 arc sec	8.5 arc sec	12 arc sec	14.5 arc sec	16.5 arc sec	19 arc sec	21 arc sec	25 arc sec
Straightness	±2.5 μm	±4 μm	±6 μm	±8 μm	±9 μm	±10 μm	±12 μm	±14 μm
Resolution	100 nm							
Maximum acceleration	2 g							
Maximum speed	2 m/s							
Maximum horizontal load	45 kg							
Maximum radial load	45 kg							
Continuous thrust	104 N							
Peak thrust	576 N							
Minimum step quantity	75 nm							
Platform quality	8kg	9.7 kg	11.4 kg	13.1 kg	15.5 kg	18.1 kg	20.4 kg	22.7 kg
Platform material	Aluminium							
Mean time between failures	20000 Hours							

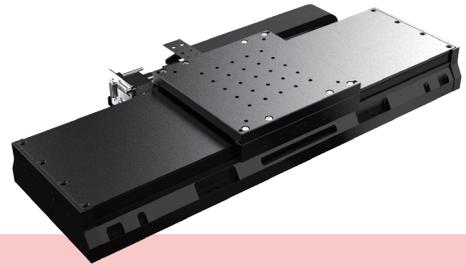
Note: The above test data was obtained from a linear amplifier in a laboratory environment, with the test point located 25mm above the center point

### Overall dimension



# Single axis precision linear platform

## PM190LS specification

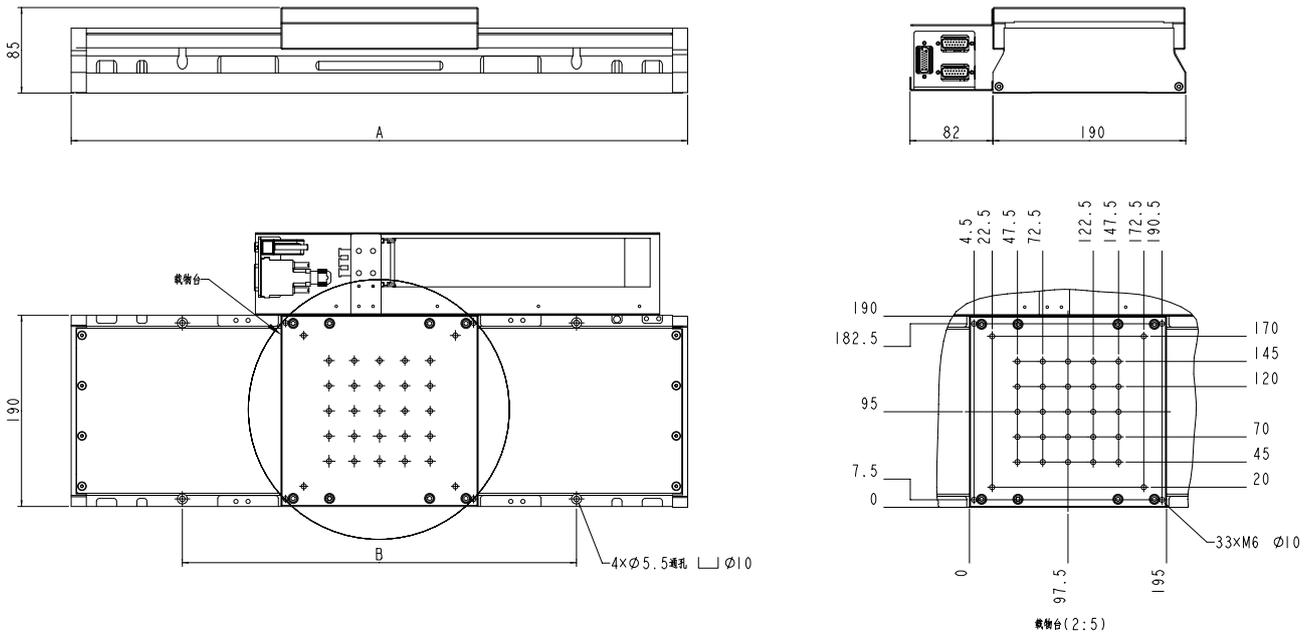


### Parameter Table

Platform model	PM190LS -100	PM190LS -200	PM190LS -300	PM190LS -400	PM190LS -500	PM190LS -600	PM190LS -800	PM190LS -1000
Effective stroke	100	200	300	400	500	600	700	800
positioning accuracy	±1µm	±1 µm	±1.5 µm	±1.5 µm				
Bi directional repetitive positioning accuracy	±0.3µm	±0.4 µm	±0.5 µm	±0.5 µm				
Pitch	6 arc sec	8 arc sec	10.5 arc sec	12 arc sec	14 arc sec	16 arc sec	20 arc sec	24 arc sec
Yaw	6 arc sec	8 arc sec	10.5 arc sec	12 arc sec	14 arc sec	16 arc sec	20 arc sec	24 arc sec
Roll	6 arc sec	8 arc sec	10.5 arc sec	12 arc sec	14 arc sec	16 arc sec	20 arc sec	24 arc sec
Straightness	±1.5µm	±2.5 µm	±3.5 µm	±4.5 µm	±5.5 µm	±6.5 µm	±8 µm	±10 µm
Resolution	100 nm							
Maximum acceleration	3 g							
Maximum speed	2 m/s							
Maximum horizontal load	45 kg							
Maximum radial load	45 kg							
Continuous thrust	130 N							
Peak thrust	720 N							
Minimum step quantity	75 nm							
Platform quality	14.5 kg	16.8 kg	19.4 kg	21.8 kg	24.2 kg	26.6 kg	29.4 kg	32 kg
Platform material	Aluminium							
Mean time between failures	27000 Hours							

Note: The above test data was obtained from a linear amplifier in a laboratory environment, with the test point located 25mm above the center point

### Overall dimension



# Single axis precision linear platform

## PM225LS specification

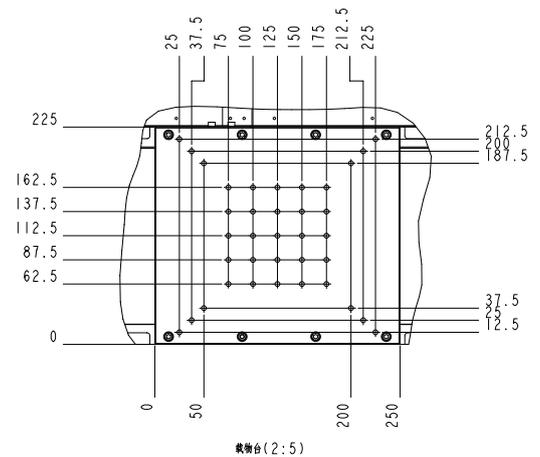
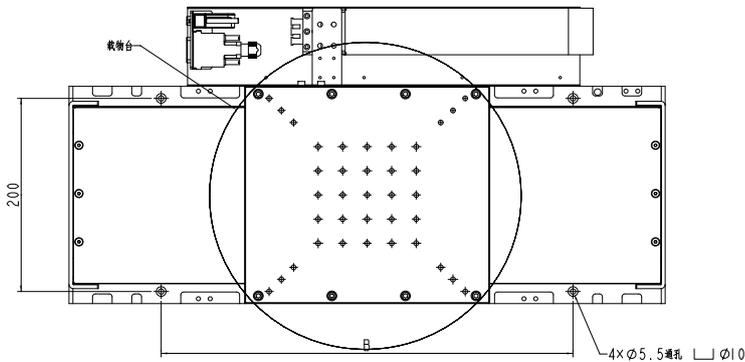
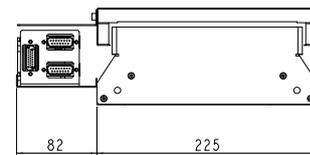
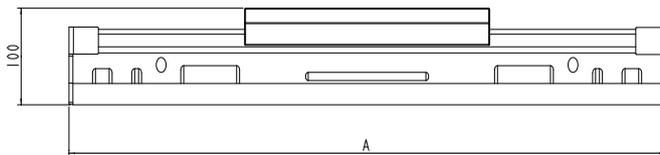


### Parameter Table

Platform model	PM225LS -100	PM225LS -200	PM225LS -300	PM225LS -400	PM225LS -500	PM225LS -600	PM225LS -800	PM225LS -1000
Effective stroke	100	200	300	400	500	600	700	800
Positioning accuracy	±1 μm	±1.5 μm	±1.5 μm					
Bi directional repetitive positioning accuracy	±0.3 μm	±0.4 μm	±0.5 μm	±0.5 μm				
Pitch	6 arc sec	8 arc sec	10.5 arc sec	14 arc sec	15 arc sec	18 arc sec	20 arc sec	24 arc sec
Yaw	6 arc sec	8 arc sec	10.5 arc sec	14 arc sec	15 arc sec	18 arc sec	20 arc sec	24 arc sec
Roll	6 arc sec	8 arc sec	10.5 arc sec	14 arc sec	15 arc sec	18 arc sec	20 arc sec	24 arc sec
Straightness	±2.5 μm	±4 μm	±4.5 μm	±7.5 μm	±8 μm	±9 μm	±10 μm	±12 μm
Resolution	100 nm							
Maximum acceleration	3 g							
Maximum speed	2 m/s							
Maximum horizontal load	45 kg							
Maximum radial load	45 kg							
Continuous thrust	204 N							
Peak thrust	1152 N							
Minimum step quantity	100 nm							
Platform quality	14.5 kg	16.8 kg	19.4 kg	21.8 kg	24.2 kg	26.6 kg	29.4 kg	32 kg
Platform material	Aluminium							
Mean time between failures	27000 Hours							

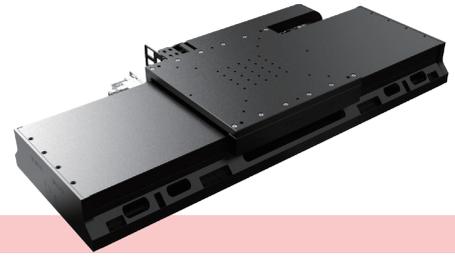
Note: The above test data was obtained from a linear amplifier in a laboratory environment, with the test point located 25mm above the center point

### Overall dimension



# Single axis precision linear platform

## PM280LS specification

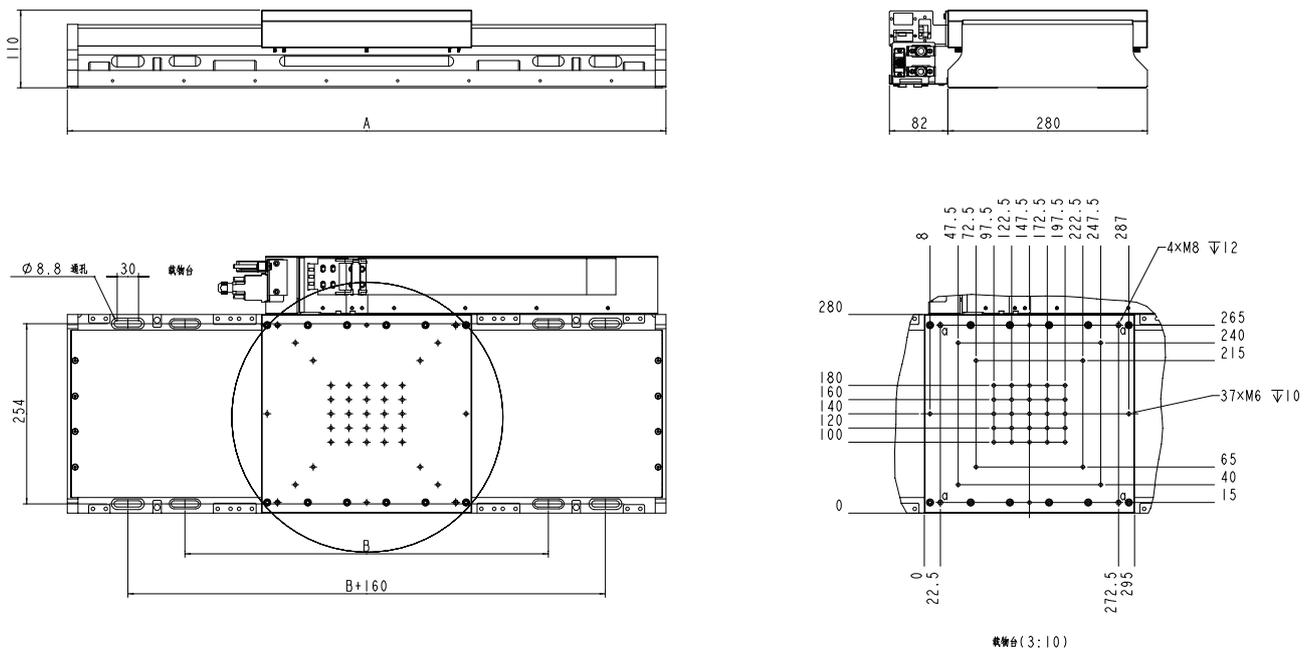


### Parameter Table

Platform model	PM280LS-300	PM280LS-400	PM280LS-500	PM280LS-600	PM280LS-700	PM280LS-800
Effective stroke	300 mm	400 mm	500 mm	600 mm	700 mm	800 mm
Positioning accuracy	±1 μm	±1 μm	±2 μm	±2 μm	±2 μm	±2 μm
Bi directional repetitive positioning accuracy	±0.5 μm	±0.5 μm	±0.6 μm	±0.6 μm	±0.6 μm	±0.8 μm
Pitch	12 arc sec	16 arc sec	18 arc sec	20 arc sec	22 arc sec	25 arc sec
Yaw	12 arc sec	16 arc sec	18 arc sec	20 arc sec	22 arc sec	25 arc sec
Roll	12 arc sec	16 arc sec	18 arc sec	20 arc sec	22 arc sec	25 arc sec
Straightness	±4 μm	±4 μm	±6 μm	±6.5 μm	±7 μm	±8 μm
Resolution	100 nm					
Maximum acceleration	3 g					
Maximum speed	2 m/s					
Maximum horizontal load	150 kg					
Maximum radial load	150 kg					
Continuous thrust	255 N					
Peak thrust	1440 N					
Minimum step quantity	200 nm					
Platform quality	55 kg	60 kg	65 kg	71 kg	76 kg	81 kg
Platform material	Aluminium					
Mean time between failures	27000 Hours					

Note: The above test data was obtained from a linear amplifier in a laboratory environment, with the test point located 25mm above the center point

### Overall dimension



# Single-axis precision linear stage

## Parameter Table

PS115LS - 100 - YT - SZ - L1 - M200

Platform model	Trip	Platform options	Feedback options	Cable Management	Motor options
	unit: mm	Original factory standard installation hole position	0.1um resolution digital input	Single side drag chain plate Single drag chain	200W motor
	50 400	YT	SZ	L1	M200
	100 500	Customer customized loading platform	Analog input	Bilateral drag chain plate Double drag chain	200W motor with brake
	150 600	DT	MN	L2	M200S
	200 700				400W motor
	250 800				M400
	300 1000				400W motor with brake
					M400S

## Application scenarios

OLED cutting/PCB drilling/CNC machining/biotechnology/IC packaging/wafer inspection

## Product Introduction

**Product Features**

- Servo ball screw drive
- High performance and low-cost solution
- High rigidity mechanical structure
- Flexible selection of configuration options
- Provide feedback options for grating rulers and rotary encoders
- Power off brake self-locking function

**Structural characteristics**

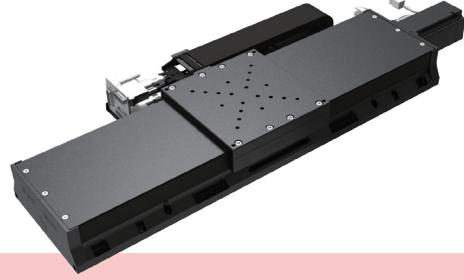
- Adopting AC brushless servo motor and screw drive
- The maximum speed can reach 300mm/s
- The PS series can meet the horizontal placement of linear axes for use
- After selecting the power-off self-locking brake configuration
- The PS series can be used as a Z-axis platform
- Can be used in conjunction with the PM series

**Customization**

Larger itinerary can be customized

# Single axis precision screw platform

## PS115LS series specifications

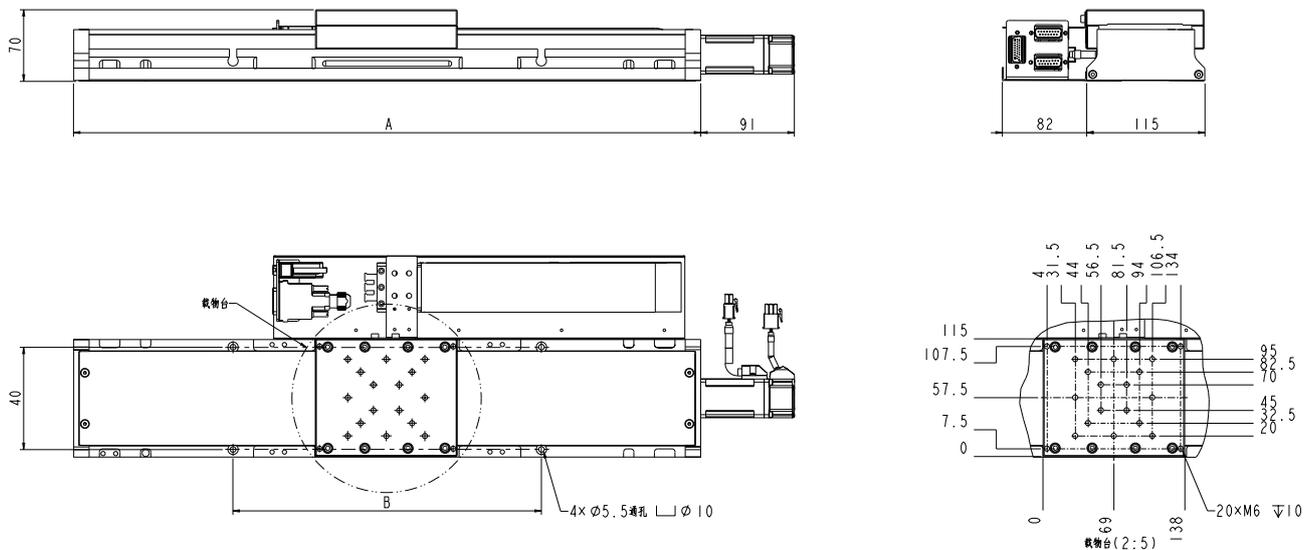


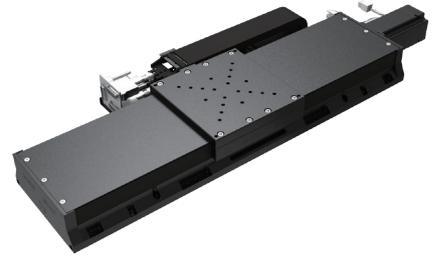
### Parameter Table

Platform model	PS115LS-50	PS115LS-100	PS115LS-150	PS115LS200	PS115LS-250	PS115LS-300
Effective stroke	50mm	100mm	150mm	200mm	250mm	300mm
Positioning accuracy	Grating ruler	$\pm 0.8\mu\text{m}$	$\pm 1\mu\text{m}$	$\pm 1\mu\text{m}$	$\pm 1.5\mu\text{m}$	$\pm 1.5\mu\text{m}$
	Rotary encoder	$\pm 1\mu\text{m}$	$\pm 1\mu\text{m}$	$\pm 1\mu\text{m}$	$\pm 1.5\mu\text{m}$	$\pm 1.5\mu\text{m}$
Bi directional repetitive positioning accuracy	Grating ruler	$\pm 0.3\mu\text{m}$	$\pm 0.3\mu\text{m}$	$\pm 0.35\mu\text{m}$	$\pm 0.4\mu\text{m}$	$\pm 0.5\mu\text{m}$
	Rotary encoder	$\pm 0.6\mu\text{m}$	$\pm 0.8\mu\text{m}$	$\pm 0.8\mu\text{m}$	$\pm 1\mu\text{m}$	$\pm 1\mu\text{m}$
pitch	4arc sec	6arc sec	7arc sec	8arc sec	9arc sec	10arc sec
yaw	4arc sec	6arc sec	7arc sec	8arc sec	9arc sec	10arc sec
roll	4arc sec	6arc	7arc sec	8arc sec	9arc sec	10arc sec
Straightness	$\pm 2\mu\text{m}$	$\pm 2.5\mu\text{m}$	$\pm 3\mu\text{m}$	$\pm 3.5\mu\text{m}$	$\pm 4\mu\text{m}$	$\pm 4.5\mu\text{m}$
Resolution	Grating ruler	1nm, 100nm, 0.1 $\mu\text{m}$				
	Rotary encoder	23bit				
Maximum Load	Horizontal placement	40kg				
	Vertical placement	20kg				
Minimum step quantity	100nm, 0.1 $\mu\text{m}$					
Platform quality	5.1kg	5.7kg	6.2kg	6.8kg	7.4kg	8.1kg
Platform material	Aluminium					
mean time between failures	27000 Hours					

Note: The above test data was obtained from a linear amplifier in a laboratory environment, with the test point located 25mm above the center point

### Overall dimension





# Single axis precision screw platform

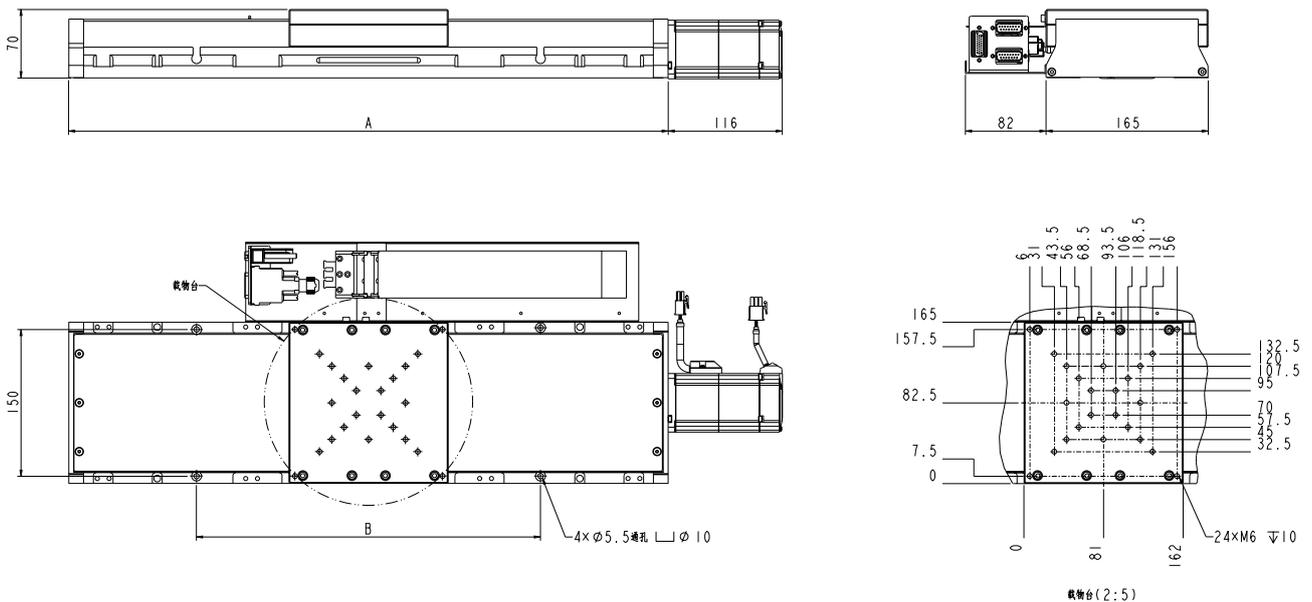
## PS165LS series specifications

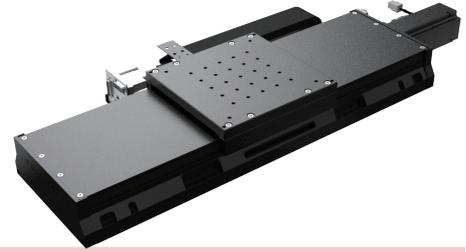
### Parameter Table

Platform model	PS165LS50	PS165LS100	PS165LS150	PS165LS200	PS165LS300	PS165LS400
Effective stroke	100 mm	200 mm	300 mm	400 mm	500 mm	600 mm
Positioning accuracy	Grating ruler	$\pm 1 \mu\text{m}$	$\pm 1 \mu\text{m}$	$\pm 1.5 \mu\text{m}$	$\pm 2 \mu\text{m}$	$\pm 2 \mu\text{m}$
	Rotary encoder	$\pm 1.5 \mu\text{m}$	$\pm 1.5 \mu\text{m}$	$\pm 1.5 \mu\text{m}$	$\pm 2 \mu\text{m}$	$\pm 2 \mu\text{m}$
Bi directional repetitive positioning accuracy	Grating ruler	$\pm 0.3 \mu\text{m}$	$\pm 0.35 \mu\text{m}$	$\pm 0.4 \mu\text{m}$	$\pm 0.45 \mu\text{m}$	$\pm 0.5 \mu\text{m}$
	Rotary encoder	$\pm 1 \mu\text{m}$	$\pm 1 \mu\text{m}$	$\pm 1 \mu\text{m}$	$\pm 1.5 \mu\text{m}$	$\pm 1.75 \mu\text{m}$
Pitch	6 arc sec	7 arc sec	8 arc sec	9 arc sec	10 arc sec	11 arc sec
Yaw	6 arc sec	7 arc sec	8 arc sec	9 arc sec	10 arc sec	11 arc sec
Roll	6 arc sec	7 arc sec	8 arc sec	9 arc sec	10 arc sec	11 arc sec
Straightness	$\pm 2 \mu\text{m}$	$\pm 2.5 \mu\text{m}$	$\pm 3 \mu\text{m}$	$\pm 3.5 \mu\text{m}$	$\pm 4 \mu\text{m}$	$\pm 5 \mu\text{m}$
Resolution	Grating ruler	1 nm, 100 nm, 0.1 $\mu\text{m}$				
	Rotary encoder	23 bit				
Maximum speed	300 m/s					
Maximum Load	Horizontal placement	45 kg				
	Vertical placement	25 kg				
Minimum step quantity	100 nm, 1 $\mu\text{m}$					
Platform quality	7 kg	7.5 kg	8 kg	9 kg	10 kg	11 kg
Platform material	Aluminium					
Mean time between failures	27000 Hours					

Note: The above test data was obtained from a linear amplifier in a laboratory environment, with the test point located 25mm above the center point

### Overall dimension





# Single axis precision screw platform

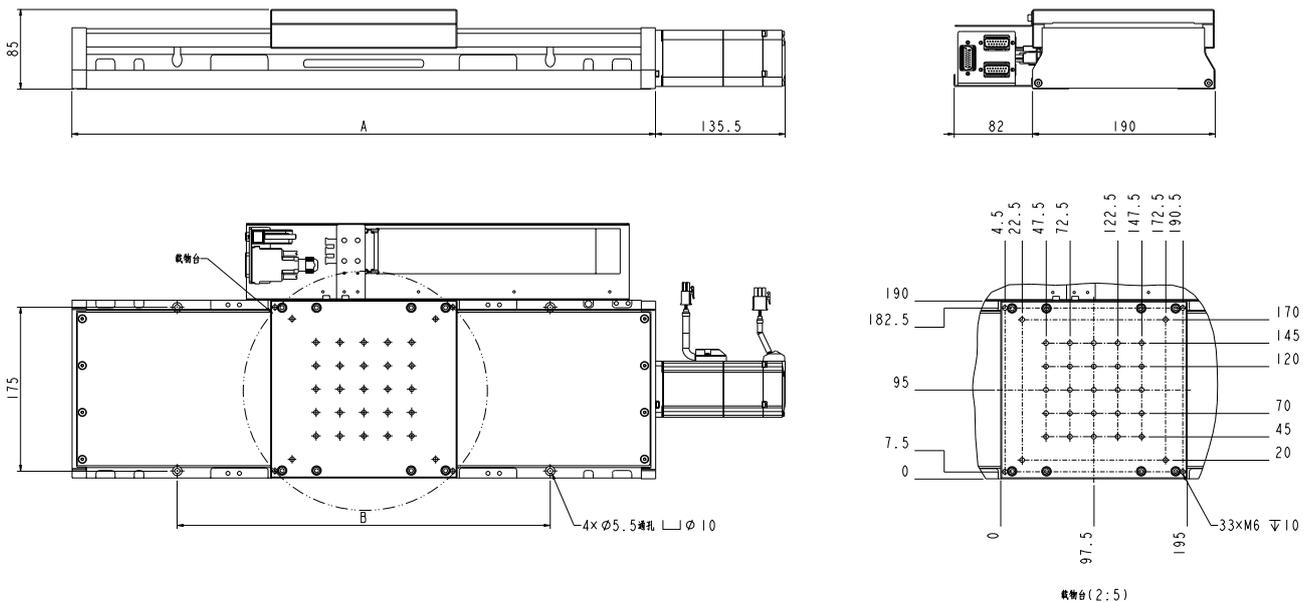
## PS190LS series specifications

### Parameter Table

Platform model	PS190LS -100	PS190LS -150	PS190LS -200	PS190LS -250	PS190LS -300	PS190LS -400	PS190LS -500	PS190LS -600	
Effective stroke	100	200	300	400	500	600	700	800	
Positioning accuracy	Grating ruler	±1 μm	±1.2 μm	±1.2 μm	±1.5 μm	±1.5 μm	±1.75 μm	±1.75 μm	±2 μm
	Rotary encoder	±1.2 μm	±1.2 μm	±1.75 μm	±1.75 μm	±1.75 μm	±2 μm	±2 μm	±2.5 μm
Bi directional repetitive positioning accuracy	Grating ruler	±0.3 μm	±0.5 μm	±0.5 μm	±0.5 μm	±0.6 μm	±0.6 μm	±0.7 μm	±0.7 μm
	Rotary encoder	±1 μm	±1 μm	±1 μm	±1.5 μm	±1.5 μm	±1.5 μm	±1.5 μm	±1.5 μm
Pitch	8 arc sec	9 arc sec	10 arc sec	11 arc sec	12 arc sec	13 arc sec	14 arc sec	15 arc sec	
Yaw	8 arc sec	9 arc sec	10 arc sec	11 arc sec	12 arc sec	13 arc sec	14 arc sec	15 arc sec	
Roll	8 arc sec	9 arc sec	10 arc sec	11 arc sec	12 arc sec	13 arc sec	14 arc sec	15 arc sec	
Straightness	±2.5 μm	±3 μm	±3.5 μm	±4 μm	±4.5 μm	±5 μm	±5.5 μm	±6.5 μm	
Resolution	Grating ruler	1 nm, 100 nm, 0.1 μm							
	Rotary encoder	23 bit							
Maximum speed	300 mm/s								
Maximum Load	Horizontal placement	60 kg							
	Vertical placement	40 kg							
Minimum step quantity	100 nm, 1 μm								
Platform quality	12 kg	12.5 kg	13 kg	14 kg	15 kg	16 kg	17 kg	18 kg	
Platform material	Aluminium								
Mean time between failures	27000 Hours								

Note: The above test data was obtained from a linear amplifier in a laboratory environment, with the test point located 25mm above the center point

### Overall dimension



# Single axis precision screw platform

## PS225LS series specifications

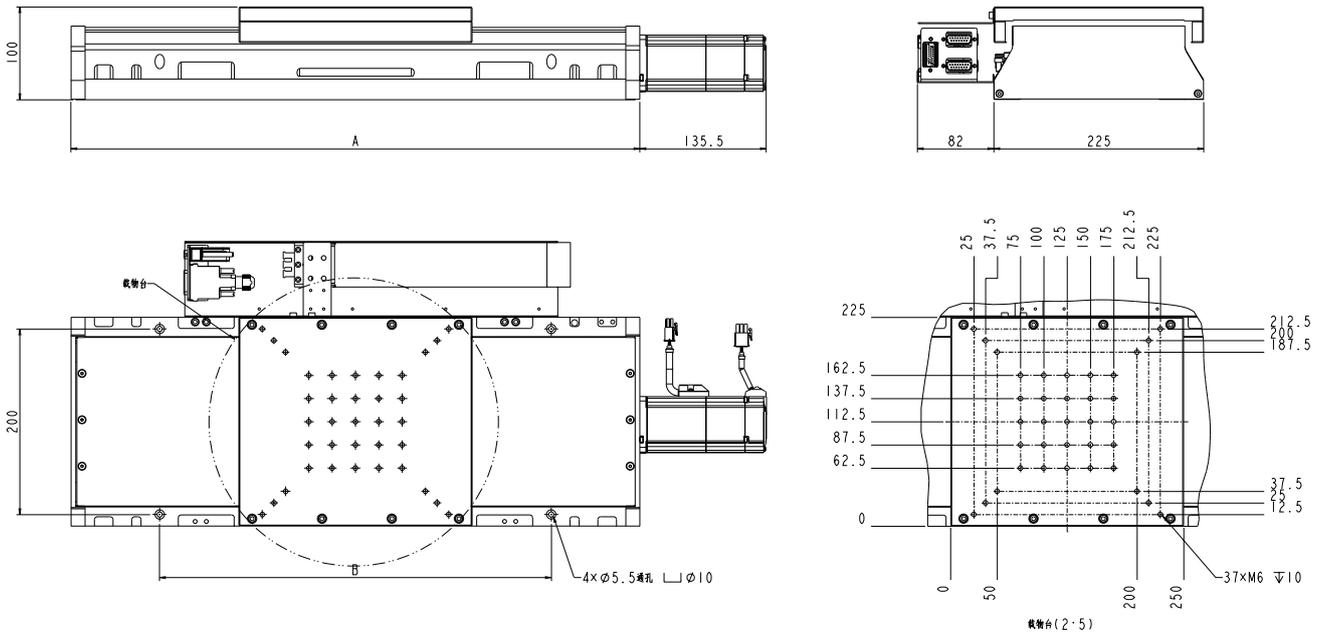


### Parameter Table

Platform model	PS225LS -100	PS225LS -150	PS225LS -200	PS225LS -300	PS225LS -400	PS225LS -500	PS225LS -600	PS225LS -800
Effective stroke	100	200	300	400	500	600	700	800
Positioning accuracy	Grating ruler	±1μm	±1.2μm	±1.5μm	±1.5μm	±1.75μm	±2μm	±2.5μm
	Rotary encoder	±1μm	±1μm	±1.5μm	±1.5μm	±1.75μm	±2μm	±2.5μm
Bi directional repetitive positioning accuracy	Grating ruler	±0.35μm	±0.4μm	±0.5μm	±0.5μm	±0.6μm	±0.6μm	±0.75μm
	Rotary encoder	±1μm	±1μm	±1μm	±1.5μm	±1.5μm	±1.5μm	±1.5μm
Pitch	7 arc sec	8 arc sec	9 arc sec	10 arc sec	11 arc sec	12 arc sec	15 arc sec	18 arc sec
Yaw	7 arc sec	8 arc sec	9 arc sec	10 arc sec	11 arc sec	12 arc sec	15 arc sec	18 arc sec
Roll	7 arc sec	8 arc sec	9 arc sec	10 arc sec	11 arc sec	12 arc sec	15 arc sec	18 arc sec
Straightness	±3μm	±3μm	±3.5μm	±4μm	±5μm	±6μm	±8μm	±9μm
resolution	Grating ruler	1nm, 10nm, 0.1μm						
	Rotary encoder	23bit						
Maximum speed	300mm/s							
Maximum Load	Horizontal placement	100KG						
	Vertical placement	60KG						
Minimum step quantity	100nm, 1μm							
Platform quality	20kg	22kg	24kg	25kg	26.5kg	29kg	32kg	35kg
Platform material	Aluminium							
Mean time between failures	27000 Hours							

Note: The above test data was obtained from a linear amplifier in a laboratory environment, with the test point located 25mm above the center point

### Overall dimension





# Plane XY cross roller stage

## Parameter Table

PLM-PlaneD-XY - 100 - YT - SZ - L1

Platform model	Trip	Platform options	Feedback options	Cable Management
	unit: mm	Original factory standard installation hole position	0.1um resolution digital input	Drag chain wiring box
		Customer customized loading platform	analog input	No drag chain wiring box
		YT	SZ	L1
		DT	MN	/

## Application scenarios

Industrial and scientific research projects that require nanometer level positioning accuracy, such as laser processing/flying shot scanning detection/measurement detection/surface roughness detection/laser cutting, etc

## Product Introduction

**Product Features**

- Dual axis four motor drive
- Excellent dynamic performance
- Resolution of 1nm
- Repetitive positioning accuracy ± 100nm
- Positioning accuracy ± 400nm
- In situ stability 3nm with multiple feedback options

**Structural characteristics**

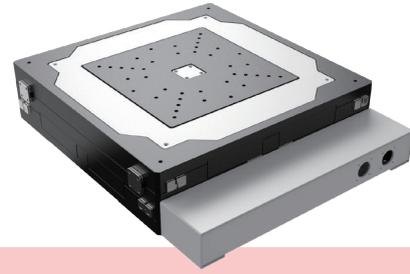
- Choose cross roller guide rail
- Compact structure
- Low side height
- Abbe error is small

**Customization**

Larger itinerary can be customized

# Planar XY Cross Roller Platform

## PlaneD-XY series specifications

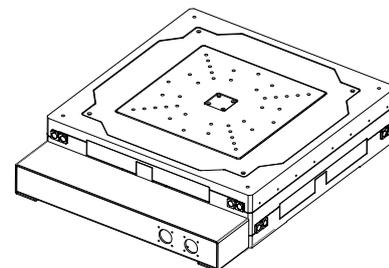
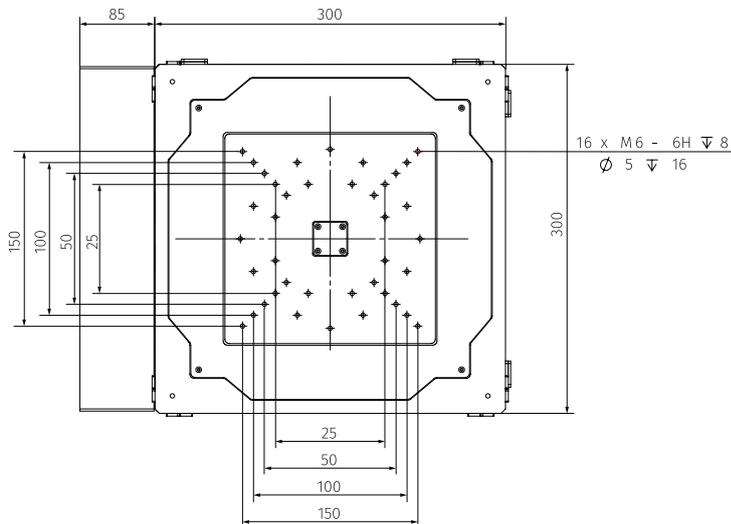
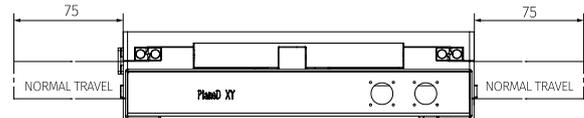
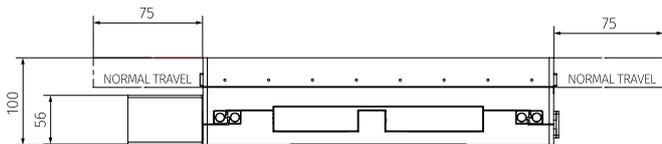


### Parameter Table

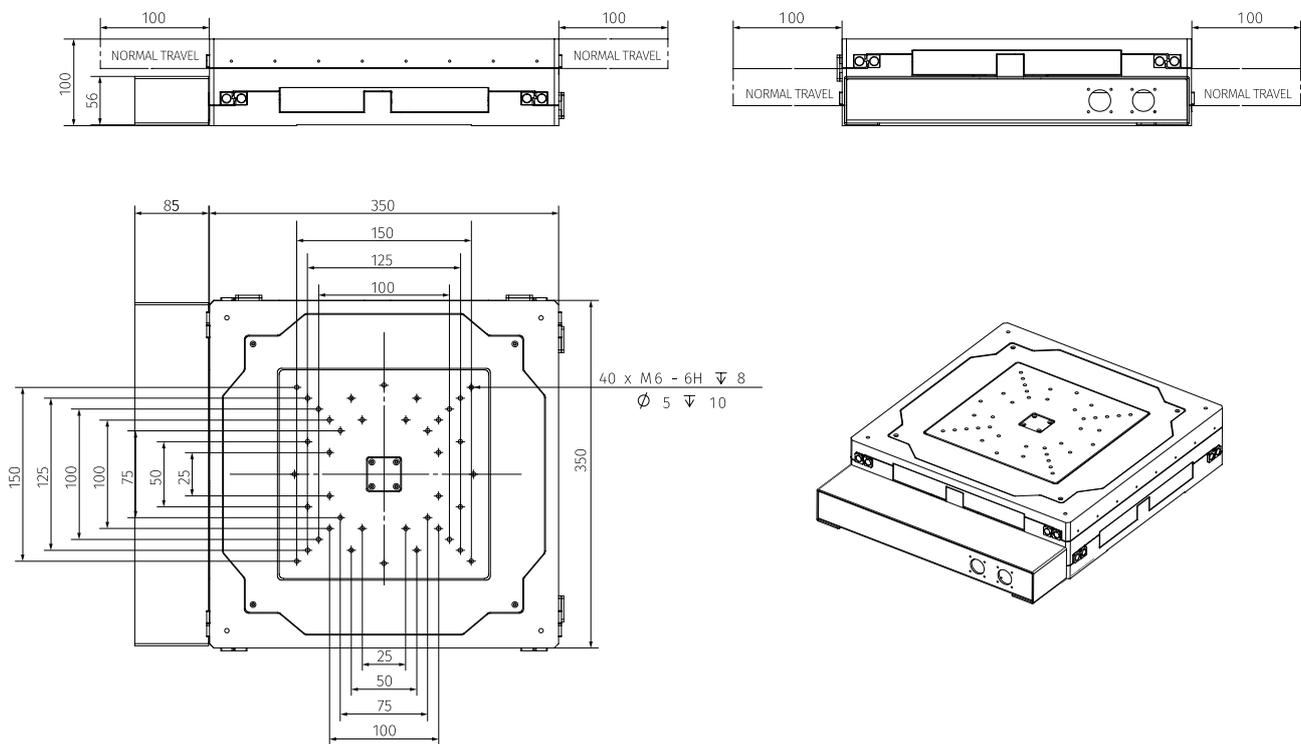
Platform model	PLM-PlaneD-XY150×150	PLM-PlaneD-XY200×200	PLM-PlaneD-XY250×250	PLM-PlaneD-XY300×300
Effective stroke	100 mm×100 mm	150 mm×150 mm	200 mm×200 mm	250 mm×250 mm
Positioning accuracy	±0.3 μm	±0.4 μm	±0.5 μm	±0.6 μm
Bi directional repetitive Positioning accuracy	±0.1 μm	±0.15 μm	±0.2 μm	±0.25 μm
Pitch	15 arc sec	16 arc sec	18 arc sec	20 arc sec
Yaw	15 arc sec	16 arc sec	18 arc sec	20 arc sec
Straightness	±1.5 μm	±2 μm	±2.5 μm	±3 μm
Resolution	1 nm			
Maximum acceleration	1.5 g			
Maximum speed	800 mm/s			
Maximum horizontal load	20 KG	20 KG	25 KG	30 KG
Continuous thrust	73 N		292 N	
Peak thrust	250 N		1000 N	
Minimum step quantity	5 nm			
Platform quality	26 KG	29 KG	35 KG	50 KG
Platform material	Aluminium			
Mean time between failures	27000 Hours			

Note: The above test data was obtained from a linear amplifier in a laboratory environment, with the test point located 25mm above the center point

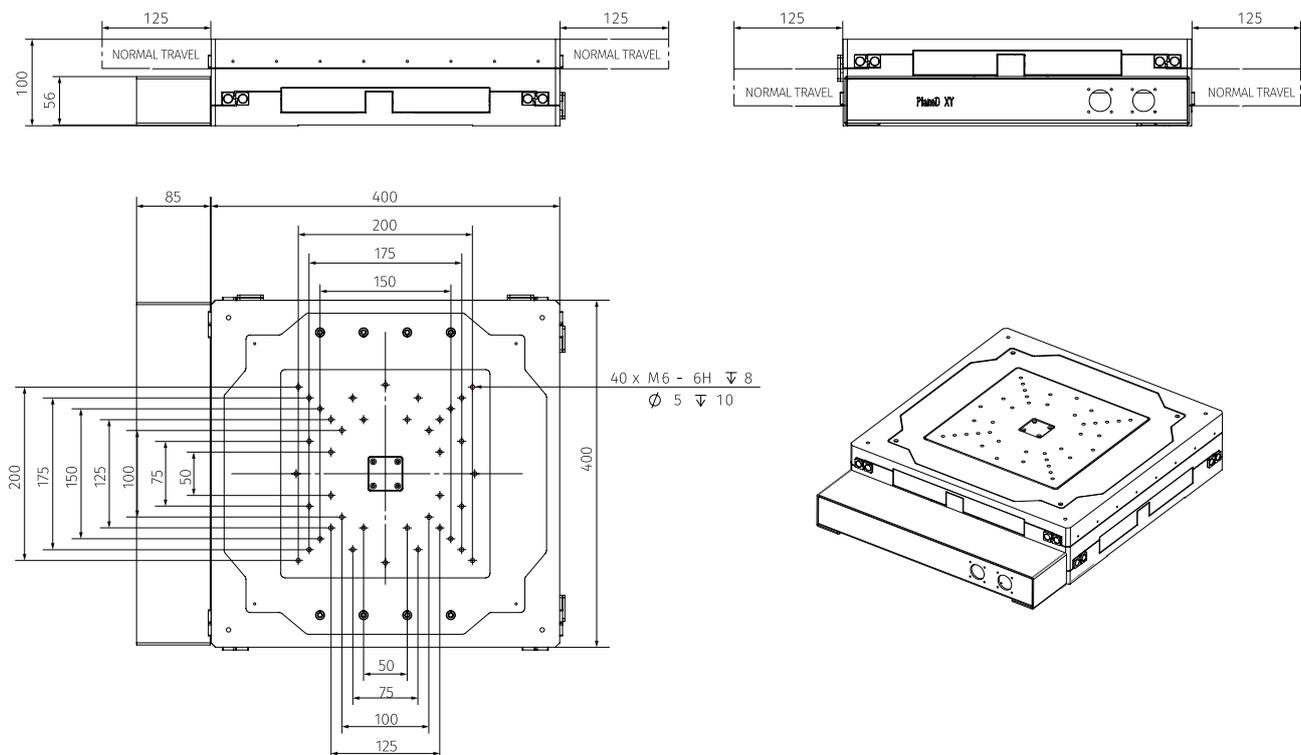
### PLM-PlaneD-XY150×150 External dimensions



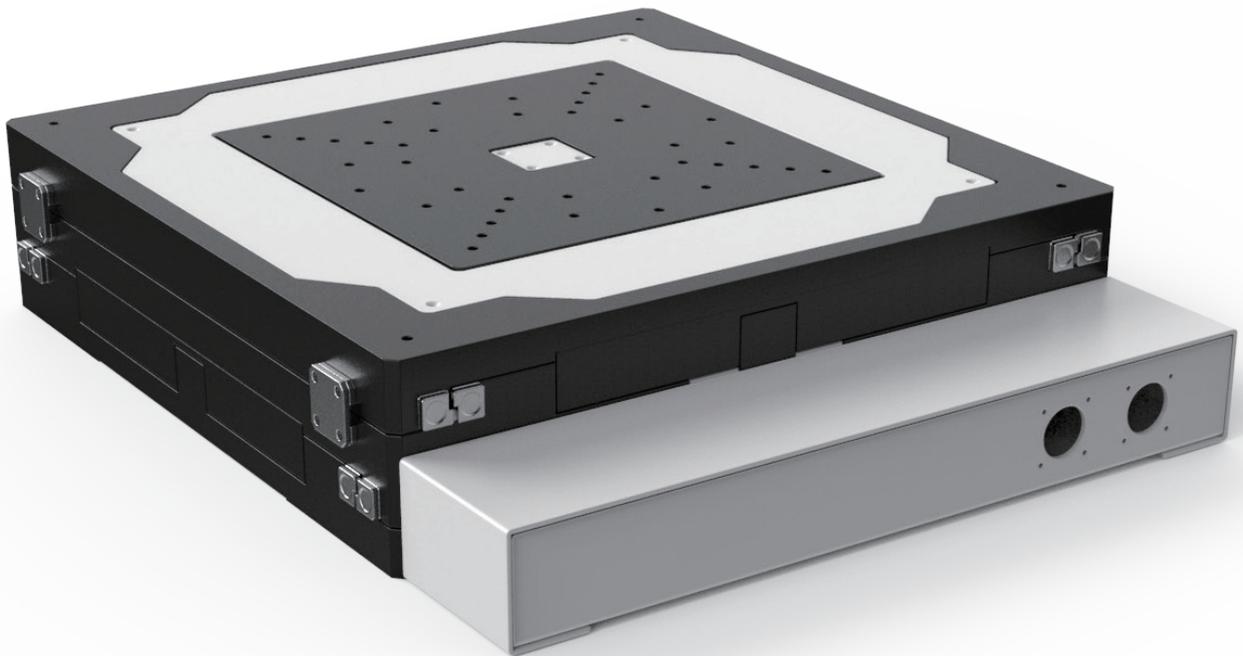
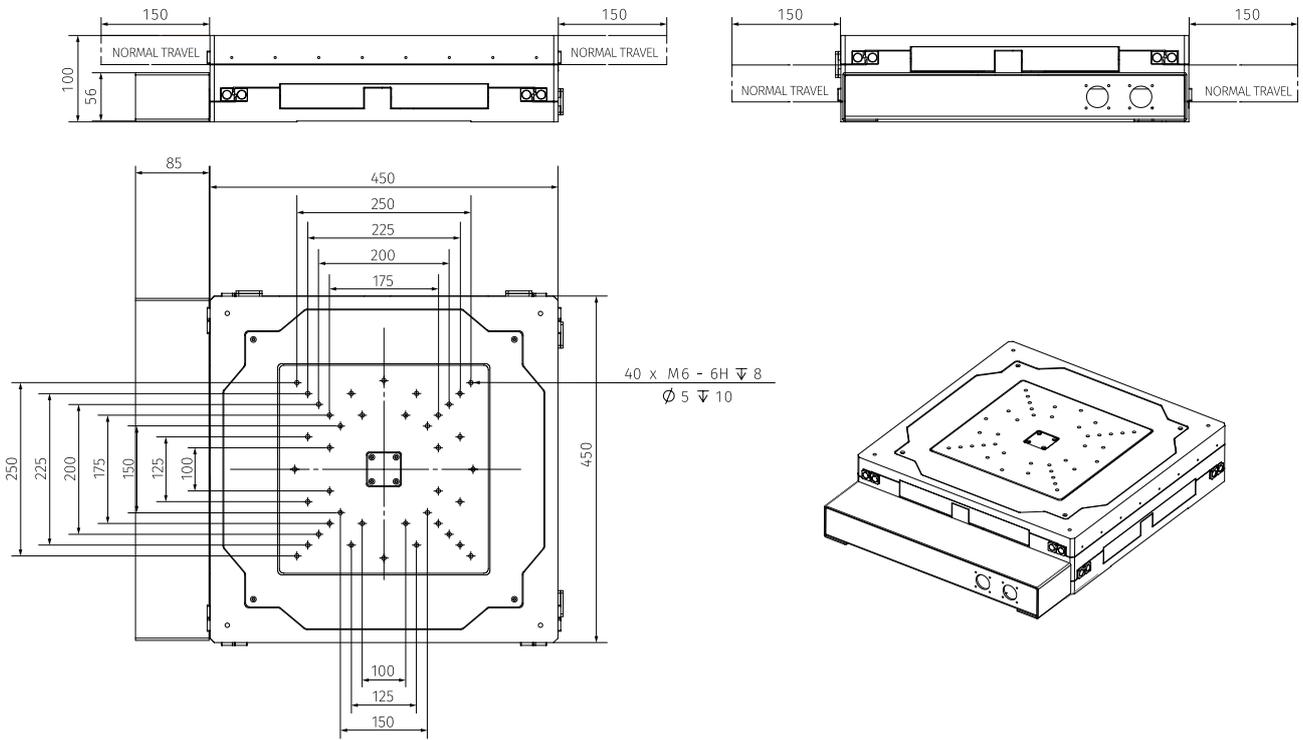
■ **PLM-PlaneD-XY200×200 External dimensions**



■ **PLM-PlaneD-XY250×250 External dimensions**



■ **PLM-PlaneD-XY300×300 External dimensions**



# Plane linear rail XY stage

## Parameter Table

PLM - Plane - XY - 150 - YT - SZ

Platform model	Trip	Platform options	Feedback options
	unit: mm	Original factory standard installation hole position	0.1um resolution digital input
	150 250	YT	SZ
	350	Customer customized loading platform	DT
			analog input
			MN

## Application scenarios

Industrial fields and scientific research projects that require nanometer level positioning accuracy, such as measurement, wafer inspection, surface roughness detection, laser cutting, etc

## Product Introduction

**Product Features**

- Open structure
- XY integrated design direct drive platform
- Bottom shaft dual motor drive
- Excellent dynamic performance
- Better geometric performance and higher load-bearing capacity
- Balancing large stroke, high precision, heavy load, and low lateral height

**Structural characteristics**

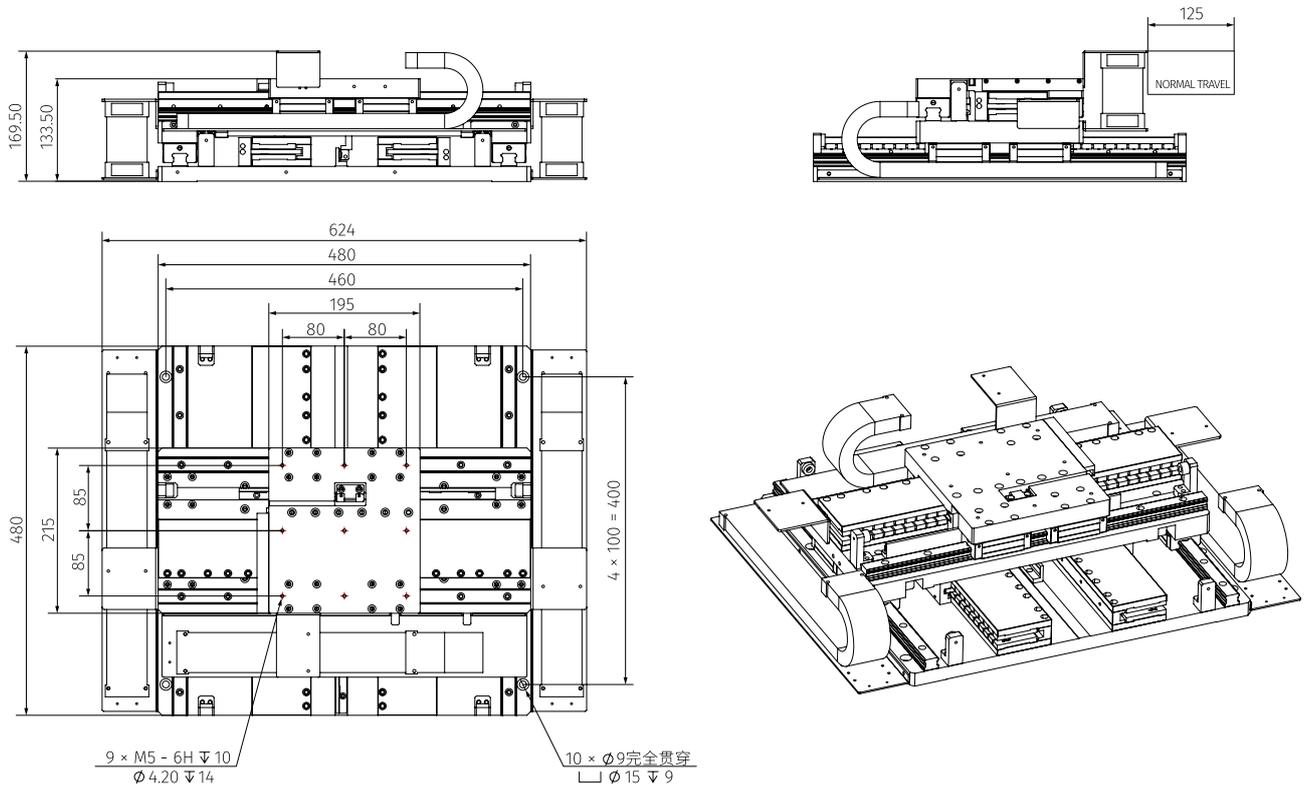
- Low side height
- Abbe error is small
- Compact platform structure with strong driving capability
- The lower shaft is driven by dual motors
- The maximum no-load speed of both the upper and lower axes can reach 2000mm/s
- The no-load acceleration can reach 2g with an electronic resolution of 1nm
- The minimum step size is less than 20nm

**Customization**

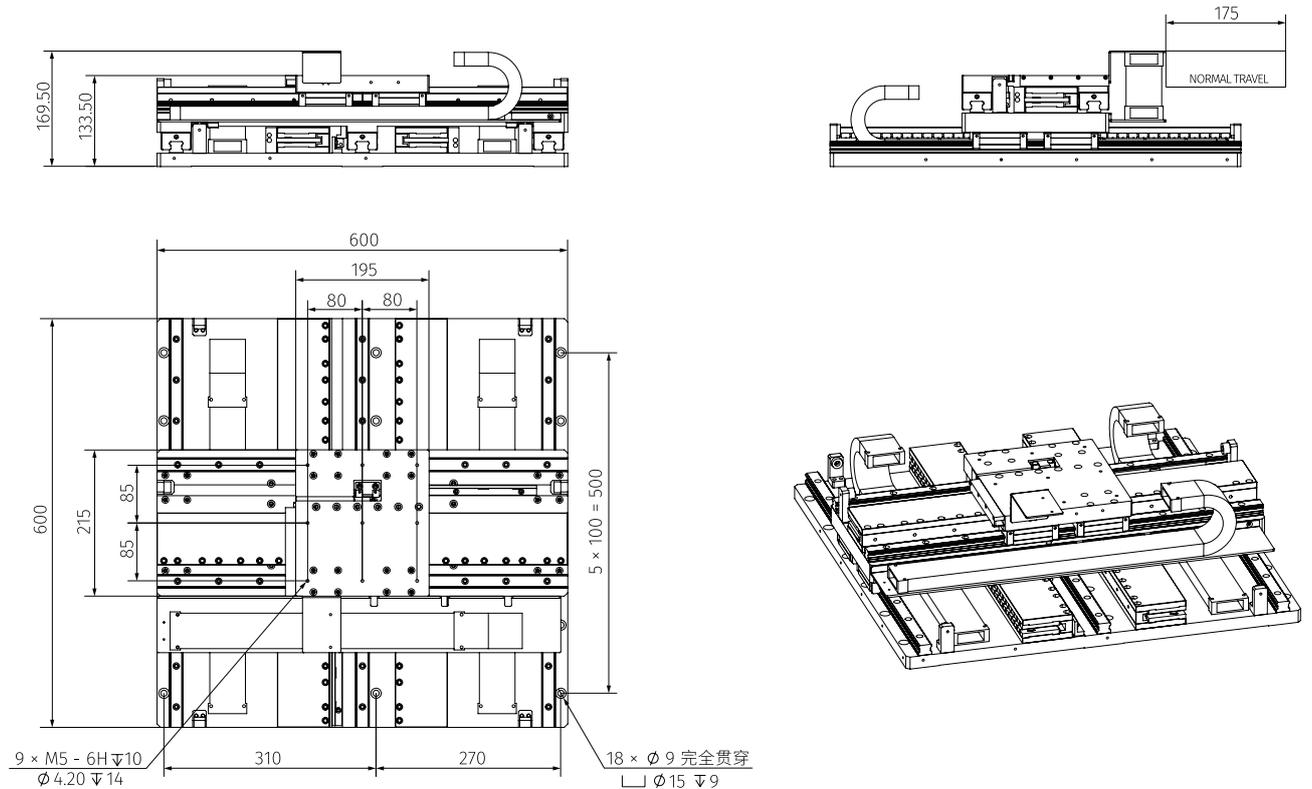
Larger itinerary can be customized



■ **PLM-Plane-XY250×250 External dimensions**



■ **PLM-Plane-XY350×350 External dimensions**





# Plane Z axis lifting stage

## Parameter Table

PLM - Plane - XY - 150 - YT - SZ

Platform model	Trip	Platform options	Feedback options
unit: mm	Original factory standard installation hole position	YT	0.1um resolution digital input
150    250	Customer customized loading platform	DT	analog input
350			SZ MN

## Application scenarios

Photolithography, detection and packaging, contour measurement in the semiconductor field, gene sequencing in the biomedical field, etc

## Product Introduction

<b>Product Features</b>	<ul style="list-style-type: none"> <li>·Vertical motion Z-axis platform with nanometer level positioning accuracy</li> <li>·Linear motor drive</li> <li>·Adopting cross roller guide rail</li> <li>·Has excellent dynamic performance and positioning accuracy</li> <li>·Resolution of 1nm</li> <li>·Repetitive positioning accuracy ± 100nm</li> <li>·Positioning accuracy ± 200nm</li> </ul>	<b>Structural characteristics</b>	<ul style="list-style-type: none"> <li>·High precision direct drive lifting platform</li> <li>·High dynamic performance (no-load cut-off frequency greater than 120Hz)</li> <li>·Low lateral height, suitable for compact space applications</li> <li>·Built in pneumatic balance, maximum load 15kg</li> <li>·Can form a multi axis system with Surface Meta or linear axis</li> <li>·In situ stability of 5nm (equipped with linear driver and isolated laboratory environment)</li> </ul>
<b>Customization</b>	Larger itinerary can be customized		

# Plane Z-axis lifting platform

## PlaneZ series specifications



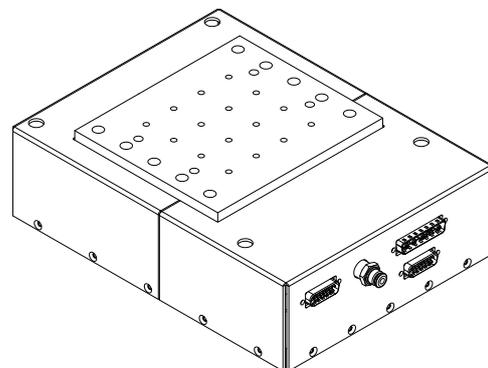
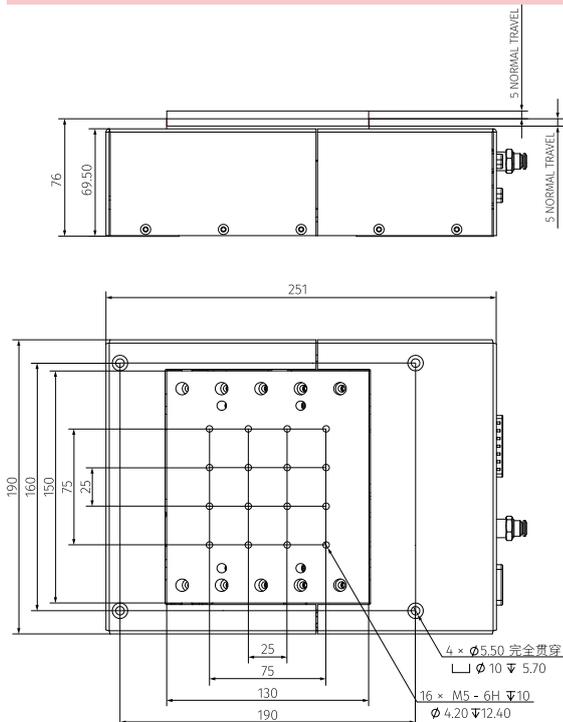
### Parameter Table

Platform model	PLM-PlaneZ-10
Effective stroke	10 mm
Absolute positioning accuracy	±300 nm
Bi directional repetitive positioning accuracy	±150 nm
Pitch	20 arc sec
Yaw	20 arc sec
Straightness	±2 μm
Maximum Load	8 kg
Resolution	1 nm
Minimum step quantity	5 nm
On-bottom stability	5 nm
Maximum speed	5 mm/s
Maximum acceleration	0.7 g
Continuous thrust	20 N
Peak thrust	45 N
Platform quality	6.2 kg
Gas supply requirements	80psi ± 5psi, with an air filter less than 0.25 μm
Platform material	Aluminium
Mean time between failures	20000 Hours

#### Remarks:

- (1) Measure parallel or perpendicular to the direction of the wedge block;
- (2) Adaptation - AS feedback, configure linear amplifier;
- (3) No load test;
- (4) Other itineraries can be customized.
- (5) The default test point position is 25 mm above the tabletop, and the performance indicators of single axis and multi axis systems are related to the actual load and working point position;

### Overall dimension



# Self-balancing Z direction motion stage

## Parameter Table

PLM - ART - Z - 40 - AS

Platform model	Trip	Feedback options
	unit: mm	VPP1 volt sine analog input
	40      100	High precision VPP1 volt sine analog input
	160	5nm resolution digital TTL signal input
		10nm resolution digital TTL signal input
		20nm resolution digital TTL signal input
		50nm resolution digital TTL signal input
		AS
		ASH
		TTLO05
		TTLO10
		TTLO20
		TTLO50

## Application scenarios

Fiber optic coupling in the communication field, circular crystal defect detection in the semiconductor field, gene sequencing in the biomedical field, and laser micro nano processing, etc

## Product Introduction

**Product Features**

- Nano level positioning accuracy
- Linear motor drive, using cross roller guide rail
- Has excellent dynamic performance and positioning accuracy
- The maximum no-load cut-off frequency can reach over 100Hz
- Resolution of 1nm
- Repetitive positioning accuracy ± 100nm
- Positioning accuracy ± 250nm

**Structural characteristics**

- Dual cylinder counterweight
- High dynamic performance (cut-off frequency greater than 100Hz)
- Cross roller guide rail
- Flexible configuration options (customizable for different itineraries)
- In situ stability of 3nm (equipped with linear driver and isolated laboratory environment)

**Customization**

Larger itinerary can be customized

# Self balancing Z-direction motion table

## ART-Z series specifications



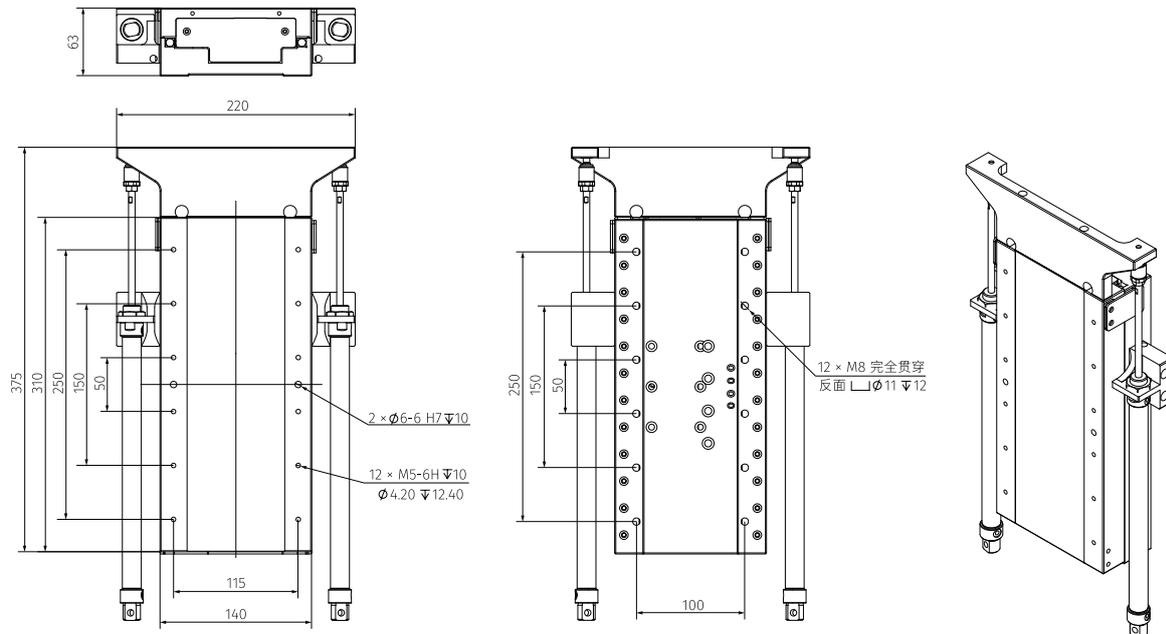
### Parameter Table

Platform model	PLM-ART-Z-040	PLM-ART-Z-100	PLM-ART-Z-160
Effective stroke	40 mm	100 mm	160 mm
Positioning accuracy	±0.3 μm	±0.4 μm	±0.5 μm
Bi directional repetitive positioning accuracy	±0.1 μm	±0.2 μm	±0.25 μm
Pitch	10 arc sec	12 arc sec	12 arc sec
Yaw	10 arc sec	10 arc sec	10 arc sec
Roll	10 arc sec	10 arc sec	10 arc sec
Straightness	±2 μm	±2 μm	±2.5 μm
Flatness	±2 μm	±2 μm	±2.5 μm
Resolution		1 nm	
Minimum step quantity		5 nm	
On-bottom stability		3 nm	
Maximum acceleration		500 m/s	
Maximum speed		1 g	
Maximum horizontal load		12 KG	
Continuous thrust		52 N	
Peak thrust		288 N	
Platform quality	2.7 kg	3.9 kg	5.2 kg
Platform material		Aluminium	
Mean time between failures		20000 Hours	

#### REMARKS:

- (1) Adaptation - ASH feedback, linear amplifier;
- (2) No load, corresponding power amplifiers need to be configured;
- (3) The default test point position is 25 mm above the tabletop, and the performance indicators of single axis and multi axis systems are related to the actual load and working point position;
- (4) The cylinder gas supply needs to be equipped with a triple air filter, which must be clean, dry, and filtered to particles below 0.25um. It is recommended to use ammonia gas with a purity of 99.9%. The air pressure can be adjusted according to the actual load weight of the platform.
- (5) Other itineraries can be customized.

### PLM-ART-Z-160 External dimensions



# Large load Z axis lifting stage

## Parameter Table

PLM - ZMS	-	23	-	YT	-	SZ
Platform model		Trip:23MM		Platform options		Feedback options
				Original factory standard installation hole position	YT	0.1um resolution digital input
				Customer customized loading platform	DT	analog input
						MN

## Application scenarios

Defect detection, optical lens inspection, and precision machining in the semiconductor field provide Z-direction precision positioning for it

## Product Introduction

**Product Features**

- High precision linear guide rail
- Servo motor drive
- Grating closed-loop feedback
- High reliability drive mechanism
- Equipped with power-off brake function to prevent heavy objects from falling off
- Long service life

**Structural characteristics**

- Adopting a wedge-shaped lifting mechanism
- Directly moving the load
- Within a long range of movement
- Maintain the shortest possible height
- Optimized the impact of system errors
- Helps improve overall accuracy performance

**Customization**

Larger itinerary can be customized



# Large load Z-axis lifting platform

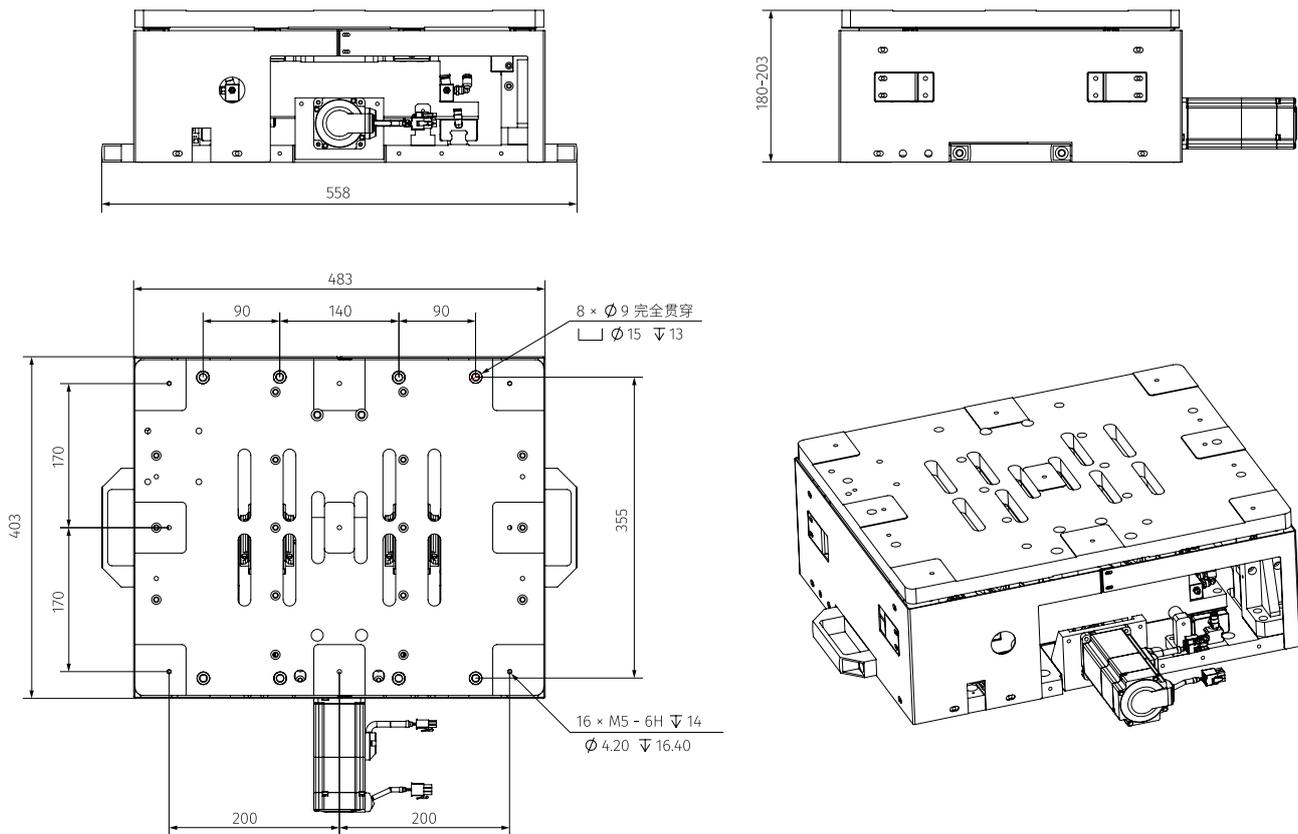
## ZMS series specifications

### Parameter Table

Platform model	PLM-ZMS-23
Effective stroke	23mm
Positioning accuracy	±2μm
Bi directional repetitive positioning accuracy	±1μm
Straightness	±2μm
Resolution	0.1μm
Maximum acceleration	2g
Maximum speed	30mm/s
Maximum horizontal load	60KG
Platform quality	50KG
Platform material	Aluminium
Mean time between failures	27000 Hours

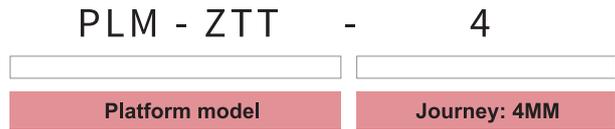
Note: The above test data was obtained from a linear amplifier in a laboratory environment, with the test point located 25mm above the center point

### External dimensions



# ZTT plane fine adjustment stage

■ **Model Naming Rules**



■ **Application scenarios**

Light source alignment/wafer inspection and other fields

■ **Product Introduction**

Product Features

- High precision linear guide rail
- Servo motor drive
- Grating closed-loop feedback
- High reliability drive mechanism
- Equipped with power-off brake function to prevent heavy objects from falling off
- long service life

Structural characteristics

- Adopting a wedge-shaped lifting mechanism
- Directly moving the load
- Within a long range of movement
- Maintain the shortest possible height
- Optimized the impact of system errors
- Helps improve overall accuracy performance

Customization

Larger itinerary can be customized

# ZTT flat fine-tuning platform

## ZTT series specifications

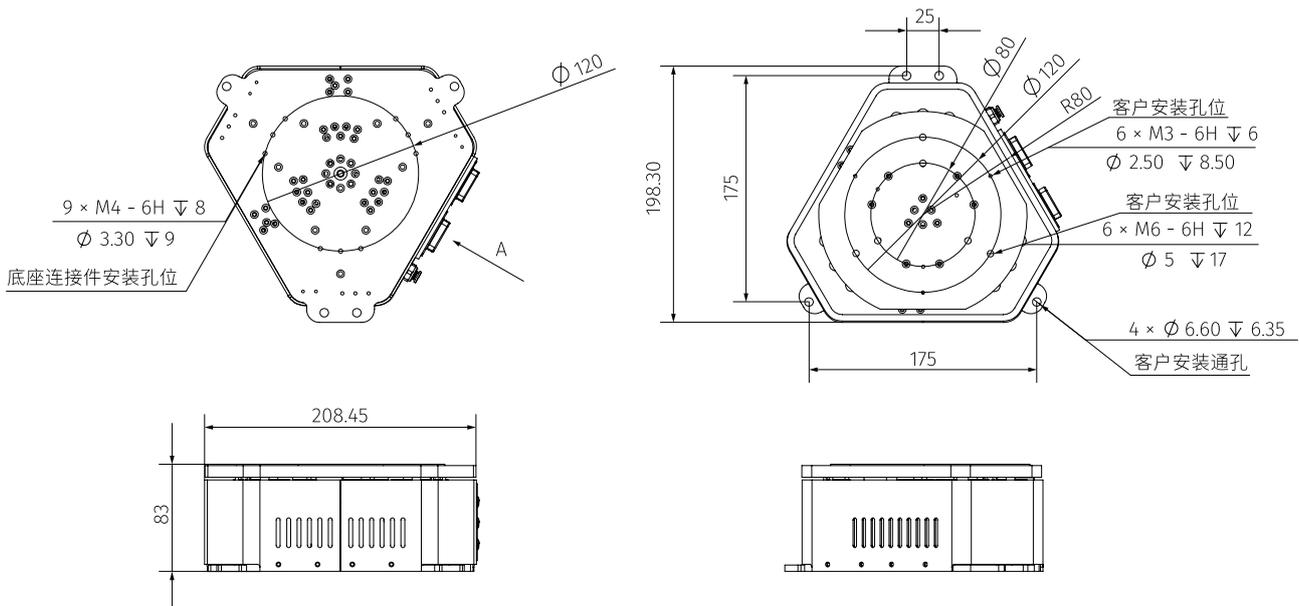


### Parameter Table

Platform model	PLM-ZTT-4		
Axial	Z	θX	θY
Effective stroke	4	2°	2°
Positioning accuracy	±0.5 μm	-	-
Repeatability	±0.25 μm	±1.5 arc sec	±1.5 arc sec
Pitch	±10 arc sec	-	-
Yaw	±10 arc sec	-	-
Straightness	±1.5 μm	-	-
Flatness	±1.5 μm	-	-
Maximum speed	1 g	-	-
Maximum acceleration	200mm/s	-	-
Minimum step quantity	100nm	1arc sec	1 arc sec
Maximum Load		10Kg	
Platform quality		6.5Kg	
Platform material		Aluminium	
Mean time between failures		27000 Hours	

Note: The above test data was obtained from a linear amplifier in a laboratory environment, with the test point located 25mm above the center point

### Overall dimension



# Air floating motor

## ■ Application scenarios

Industrial fields and scientific research projects that require angular second level positioning accuracy, such as measurement and detection, biological sample processing and observation, synchronous acceleration research, precision manufacturing, optical alignment, and system calibration

## ■ Product Introduction

**Product Features**

- High precision air floating direct drive turntable
- Directly driven by a rotating motor
- Has excellent dynamic performance and positioning accuracy
- Market leading axial, radial, and tilt error motion performance
- Provide excellent rotational absolute positioning accuracy, repeatability, and negative
- Load capacity, easily integrated into multi axis motion systems

**Structural characteristics**

- Low height flat design
- Sub arcsecond level positioning accuracy
- Axial and radial runout less than 250nm
- No slots, brushless servo direct drive motor drive
- Minimize axial, radial, and tilt error motion to the greatest extent possible
- Excellent positioning performance, speed stability, and high-resolution feedback
- Non contact air floating bearings contribute to ultra precise motion performance

**Customization**

Larger itinerary can be customized

# Air floating direct drive rotating platform

## PLM-QFML225-R specification



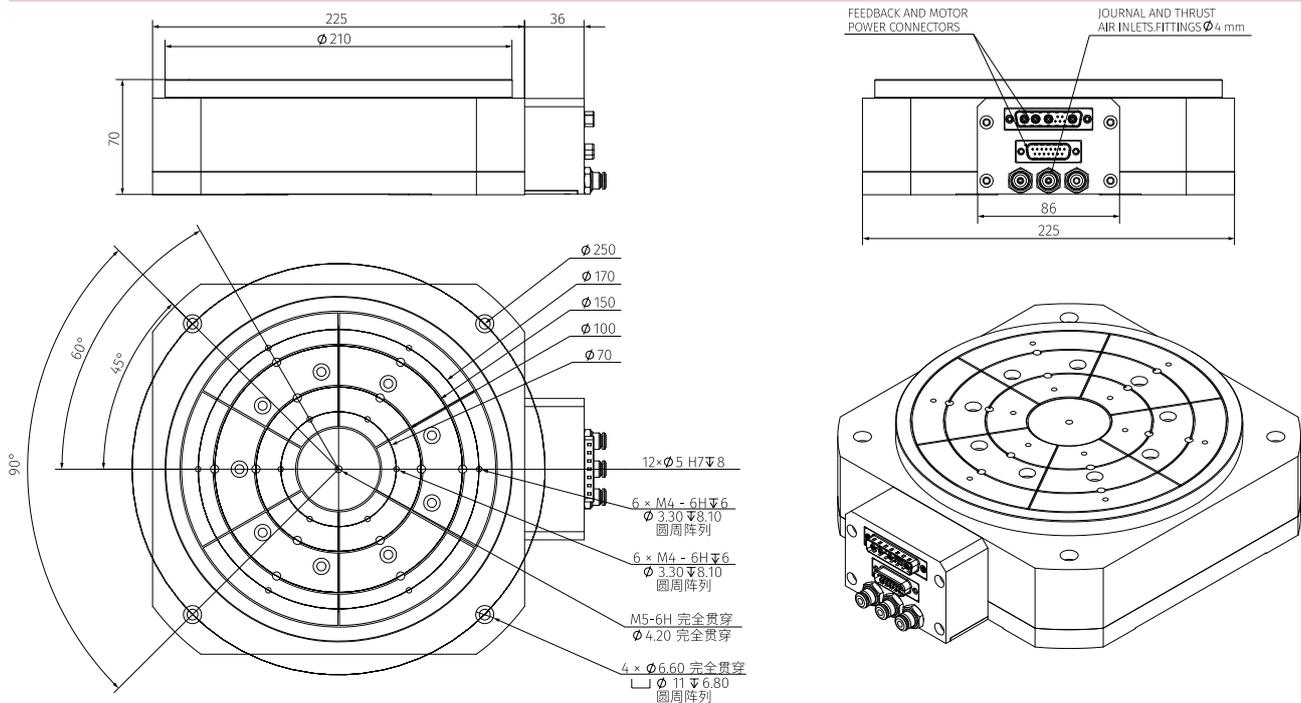
### Parameter Table

Platform model	PLM-QFML225-R
Turntable travel	360°
Carrier diameter	210 mm
Height	70 mm
Corner accuracy	±2 arc sec
Repeatability	±0.5 arc sec
Axis jump	250 nm
End jump	300 nm
Minimum step quantity	0.5 arc sec
On-bottom stability	0.5 arc sec
Continuous torque	20 N.M
Peak torque	40 N.M
Maximum horizontal load	100 KG
Maximum radial load	50 KG
Maximum speed ②	600 rpm
Platform quality	12.5 kg
Gas supply requirements	80 psi ± 5 psi, with an air filter less than 0.25 μ m
Platform material	Aluminium
Mean time between failures	20000 Hours

#### NOTES:

- (1) Adaptation - AS feedback, configure linear amplifier;
- (2) No load, corresponding power amplifiers need to be configured;
- (3) The default test point position is 25mm above the tabletop, and the performance indicators of single axis and multi axis systems are related to the actual load and working point position;
- (4) The cylinder gas supply needs to be equipped with a triple air filter, which must be clean, dry, and filtered to particles below 0.25um. It is recommended to use nitrogen gas with a purity of 99.9%. The air pressure can be adjusted according to the actual load weight of the platform.
- (5) To prevent insufficient air pressure in the air bearing, it is recommended to install an air pressure switch and input the signal to the emergency stop (E-STOP) port connected to the motion controller.

### Overall dimension



# fixation-girder stage

## Parameter Table

PDM - DLXY - 400 - 400 - YT - SZ

Platform model	Trip:23MM	Platform options	Feedback options
unit: mm		Original factory standard installation hole position	Resolution digital input
400	600	YT	SZ
800		Customer customized loading platform	analog input
		DT	MN

## Application scenarios

OLED cutting/PCB drilling/CNC machining/biotechnology/IC packaging/wafer inspection

## Product Introduction

Product Features

- High precision positioning platform
- High performance and low cost
- Modular products
- Flexible configuration
- Quick plug and unplug, convenient for users to quickly install and debug
- You can freely choose your itinerary according to your needs (customization accepted)

Structural characteristics

- Adopting ironless linear motor control
- High load, high precision, large stroke, high rigidity
- The precision platform is dust-proof
- Centralized oil injection, metal grounding function

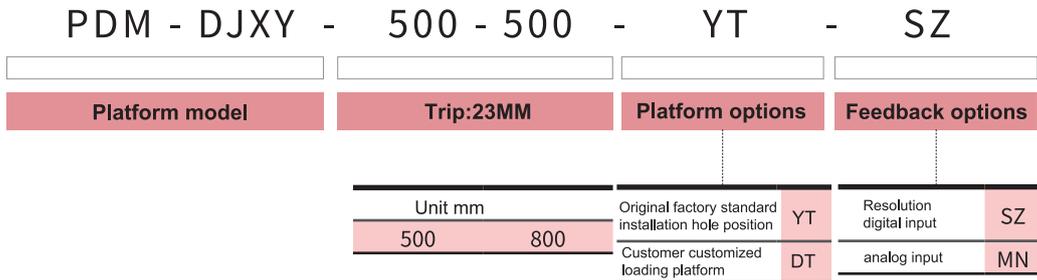
Customization

Larger itinerary can be customized



# XY cross stage

## Model Naming Rules



## Application scenarios

OLED cutting/PCB drilling/CNC machining/biotechnology/IC packaging/wafer inspection

## Product Introduction

Product Features

- High precision, low cost, modular design
- Easy for users to quickly install and debug
- Flexible configuration
- You can freely choose your itinerary according to your needs (customization accepted)

Structural characteristics

- Adopting XY integrated structure
- Bottom shaft dual drive high load, high precision, large stroke, high rigidity
- Equipped with auxiliary functions such as centralized oil injection and metal grounding

Customization

It can be evaluated and customized according to customer needs such as configuration, itinerary, load, special structure, etc

# XY Cross Platform

## PDM-DJXY series specifications

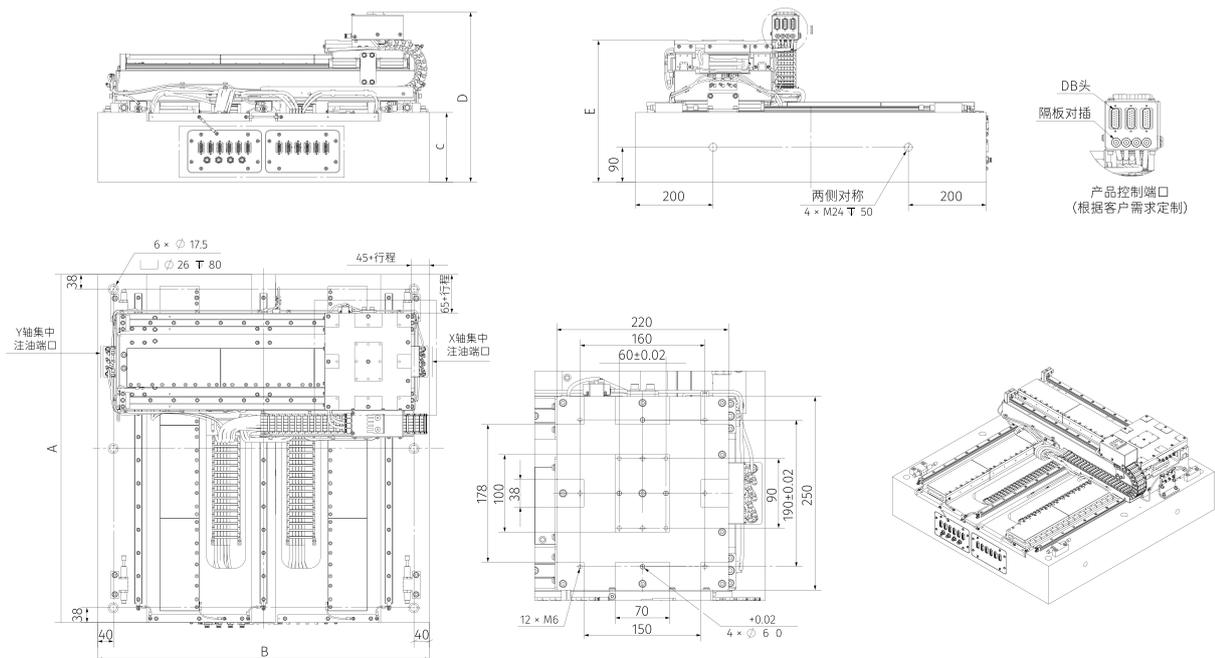


### Parameter Table

Platform model	PDM-DJXY-500-500	PDM-DJXY-800-800
Effective stroke	500 mm*500 mm	800 mm*800 mm
Positioning accuracy	±2 μm	±2 μm
Bi directional repetitive positioning accuracy	±1 μm	±1 μm
Pitch	15 arc sec	20 arc sec
Yaw	15 arc sec	20 arc sec
Roll	15 arc sec	20 arc sec
Straightness	±3 μm	±5 μm
Resolution	100 nm	
Maximum acceleration	1.5 g	
Maximum speed	1.5 m/s	
Product load	40 KG	
Continuous thrust	X-axis	170 N
	Y-axis	659 N
Peak thrust of P	X-axis	850 N
	Y-axis	3298 N
Minimum step quantity	500 nm	
Platform quality	450 KG	720 KG
Platform material	marble	
Mean time between failures	20000 Hours	

Note: The above test data was obtained in a laboratory environment, with the test point located 25mm above the center point, using a linear amplifier&Renishaw laser interferometer

### Overall dimension



Platform model	A	B	C	D	E
PDM-DJXY-500-500	900 mm	850 mm	180 mm	440 mm	367 mm
PDM-DJXY-800-800	1200 mm	1150 mm	200 mm	460 mm	387 mm

# H-type plane air floating stage

## ■ Parameter Table

PLM - PlaneH - XY - 400 - YT - SZ

Platform model	Trip	Platform options	Feedback options
	unit: mm	Original factory standard installation hole position	Resolution digital input
	500 800	YT	SZ
		Customer customized loading platform	analog input
		DT	MN

## ■ Application scenarios

Suitable for wafer inspection applications of different sizes and processes

## ■ Product Introduction

**Product Features**

- High dynamic performance
- Smooth movement without friction or vibration
- Grating ruler resolution of 1nm
- Low thermal expansion coefficient

**Structural characteristics**

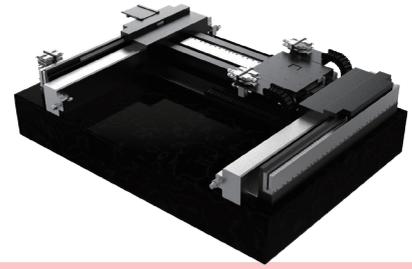
- The dual drive crossbeam adopts an H-bridge structure with air guide rails
- XY integrated type
- Low Abbe arm

**Customization**

It can be evaluated and customized according to customer needs such as configuration, itinerary, load, special structure, etc

# H-shaped flat air floating platform

## PlaneH series specifications

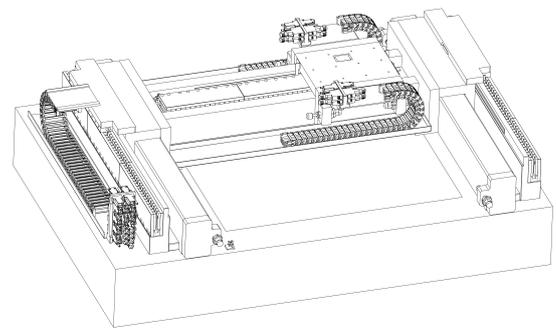
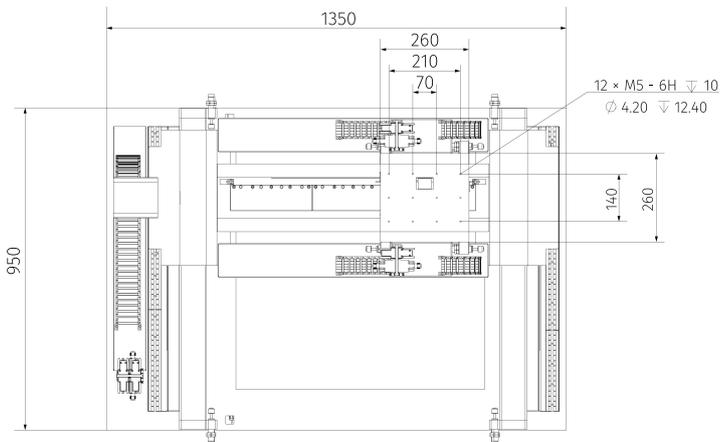
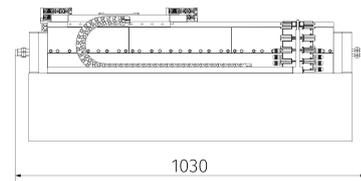
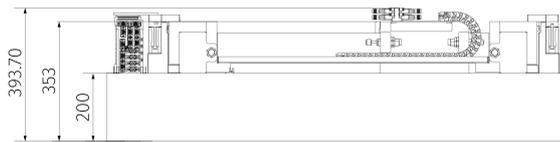


### Parameter Table

Platform model	PLM-PlaneH-XY-400
Effective stroke	400 mm×400 mm
Positioning accuracy	±0.3 μm
Bi directional repetitive positioning accuracy	±0.2 μm
Pitch	2.5 arc sec
Yaw	2.5 arc sec
Straightness	±1.5 μm
Flatness	±1.5 μm
Resolution	1 nm
Maximum acceleration	0.5 g
Maximum speed	500 mm/s
Maximum horizontal load	30 KG
Continuous thrust	Upper axis: 204N Lower axis: 510N
Peak thrust	Upper axis: 1152N Lower axis: 2880N

Note: The above test data was obtained from a linear amplifier in a laboratory environment, with the test point located 25mm above the center point

### Overall dimension



# XYR AOI inspection stage

## Parameter Table

Platform model	PDM-X160-Y160-R30-AOIMJ		
Axial	X-axial	Y-axial (Dual motor)	R-axial
Motor model	PU-60A-1	PU-60A-2	PD170
Continuous thrust	170N	326.8 N	5 N.m
Peak thrust	850N	1649 N	14 N.m
Persistent current	4.1 Arms	4.0 Arms	1.4 Arms
Peak current	20.7 Arms	20.0 Arms	4.2 Arms
Mechanical parameters			
Shafting	X-axial	Y-axial	R-axial
Effective stroke	160	160	±15°
Load	DD+5kg	X+DD+5kg	5kg
Speed	1 m/s	1 m/s	120 rpm
Acceleration	1G	1G	-
Pause time	-	-	-
Repeatability	±1 μm	±1 μm	±1.5 arc sec
Positioning accuracy	±2 μm	±2 μm	±3 arc sec
Straightness	±2 μm	±2 μm	-
Flatness	±2 μm	±2 μm	-
End face adjustment	-	-	±2 μm
Overall plane jumping		10 μm	
Installation method		level	

## Application scenarios

Mainly used in various fields such as automotive electronics, display inspection (digital tubes, LCD screens, LED displays), medicine, food, precision parts processing, size measurement, product positioning, etc. The purpose of measuring, counting, testing, and intelligent judgment after the product is run to the corresponding position

## Product Introduction

**Product Features**

- High precision and high stability direct drive structure design
- Non contact high-precision grating ruler
- XY adopts high-precision linear guide rail
- The itinerary, size, and cables can be customized according to customer requirements
- Equipped with a non-contact high-precision grating ruler, it has excellent performance

**Structural characteristics**

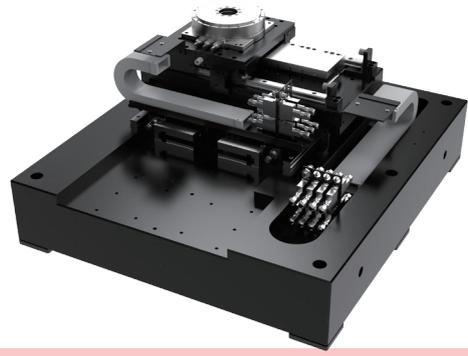
- Adopting XYR stacking structure, ironless linear motor direct drive control, no cogging effect, smooth operation at low speeds (with small speed fluctuations)
- DD end face runout is less than 2um
- The overall planar runout of the assembled platform is less than 10um
- The repeatability of the entire journey is less than ± 1 um
- Positioning accuracy less than ± 2um

**Customization**

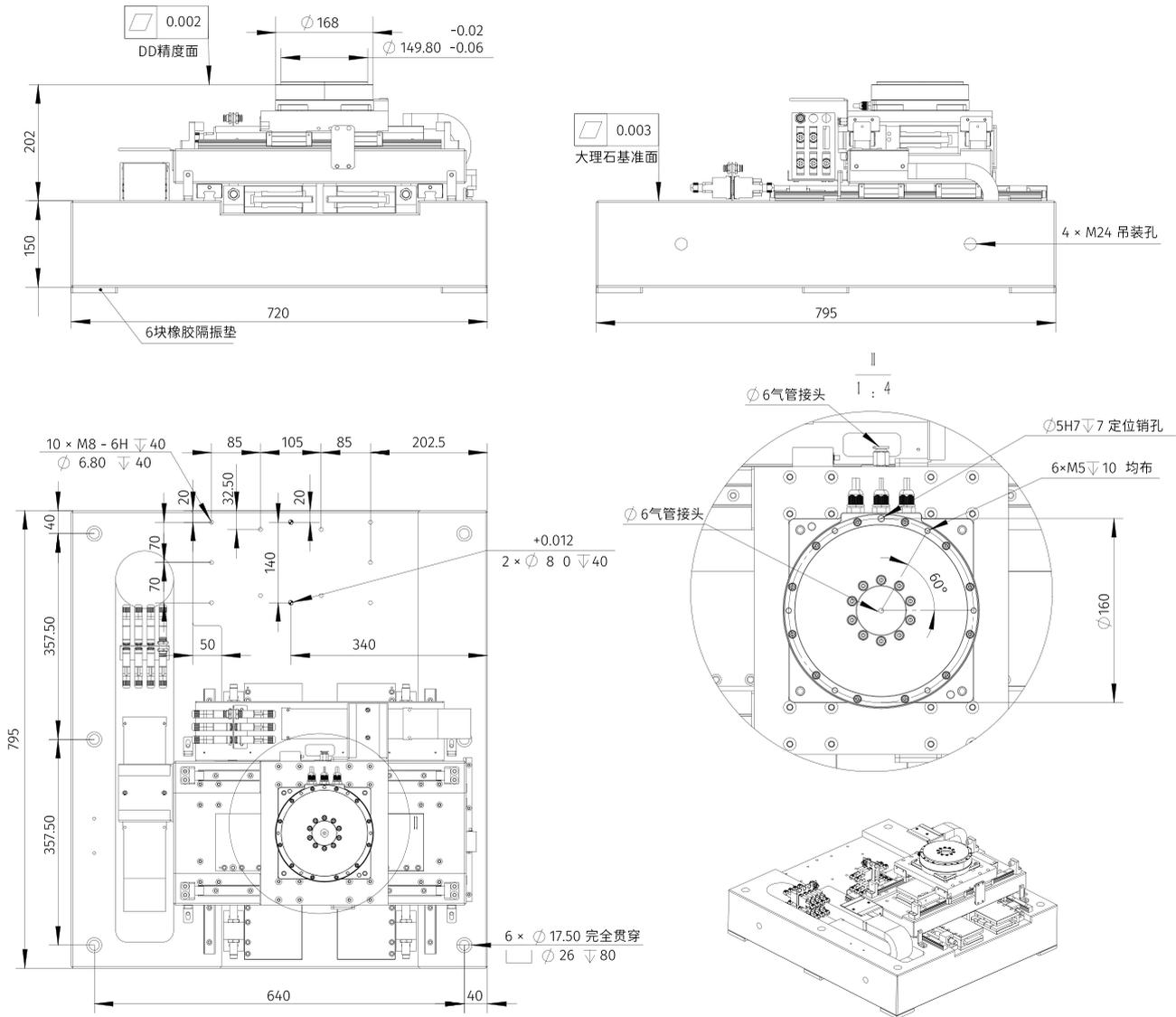
It can be evaluated and customized according to customer needs such as configuration, itinerary, load, special structure, etc

# XYR AOI Testing Platform

## PDM-X160-Y160-R30-AOIMJ specification



### Overall dimension



# XYZ AOI inspection stage

## Parameter Table

Platform model	PDM-X500-Y400-Z10-ZKHY		
Axial	X-axial	Y-axial	Z-axial
Motor model	PU-30B-3	PU-30B-3 (Shuangdong Son)	-
Continuous thrust	153 N	153 N	23 N
Peak thrust	884 N	884 N	170 N
Persistent current	2.54 Arms	2.54 Arms	-
Peak current	8.84 Arms	8.84 Arms	-
Mechanical parameters			
Effective stroke	500 mm	400 mm	10 mm
Load	Z-axial+5.5 kg	Z-axial+X-axial+5.5 kg	5.5 kg
Maximum speed	600 mm/s	600 mm/s	100 mm/s
Work speed	200 mm/s	100 mm/s	100 mm/s
Vertical straightness	±2 μm	±2 μm	±2 μm
Acceleration	0.6 g	0.6 g	0.3 g
Pause time	-	-	-
Repeatability	±1 μm	±1 μm	±1 μm
Positioning accuracy	±2 μm	±2 μm	±2 μm
Horizontal straightness	±2 μm	±2 μm	±2 μm
PITCH	±5 arc sec	±5 arc sec	-
YAW	±5 arc sec	±5 arc sec	-
Orthogonality	±5 arc sec		-
Z-axis corresponding frequency	3μm@ 230nm@50Hz		
Overall plane jumping	-		
Installation method	Horizontal installation		

## Application scenarios

A high-precision three-axis high-precision motion table with a three-axis stacked structure, suitable for industrial projects requiring high precision and efficiency such as laser processing, optical manufacturing and testing

## Product Introduction

**Product Features**

- Design of three-axis direct drive structure
- Z-axis direct drive lift structure
- Z-axis with built-in pneumatic balance configuration, maximum load of 10kg
- XY adopts high-precision linear guide rail, and Z-axis adopts anti creep cross roller guide rail
- XY adopts a marble base, with travel dimensions customized according to customer requirements

**Customization**

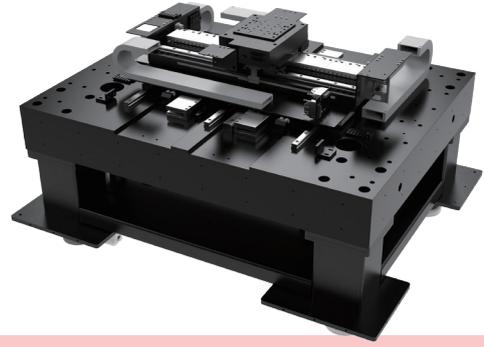
It can be evaluated and customized according to customer needs such as configuration, itinerary, load, special structure, etc

**Structural characteristics**

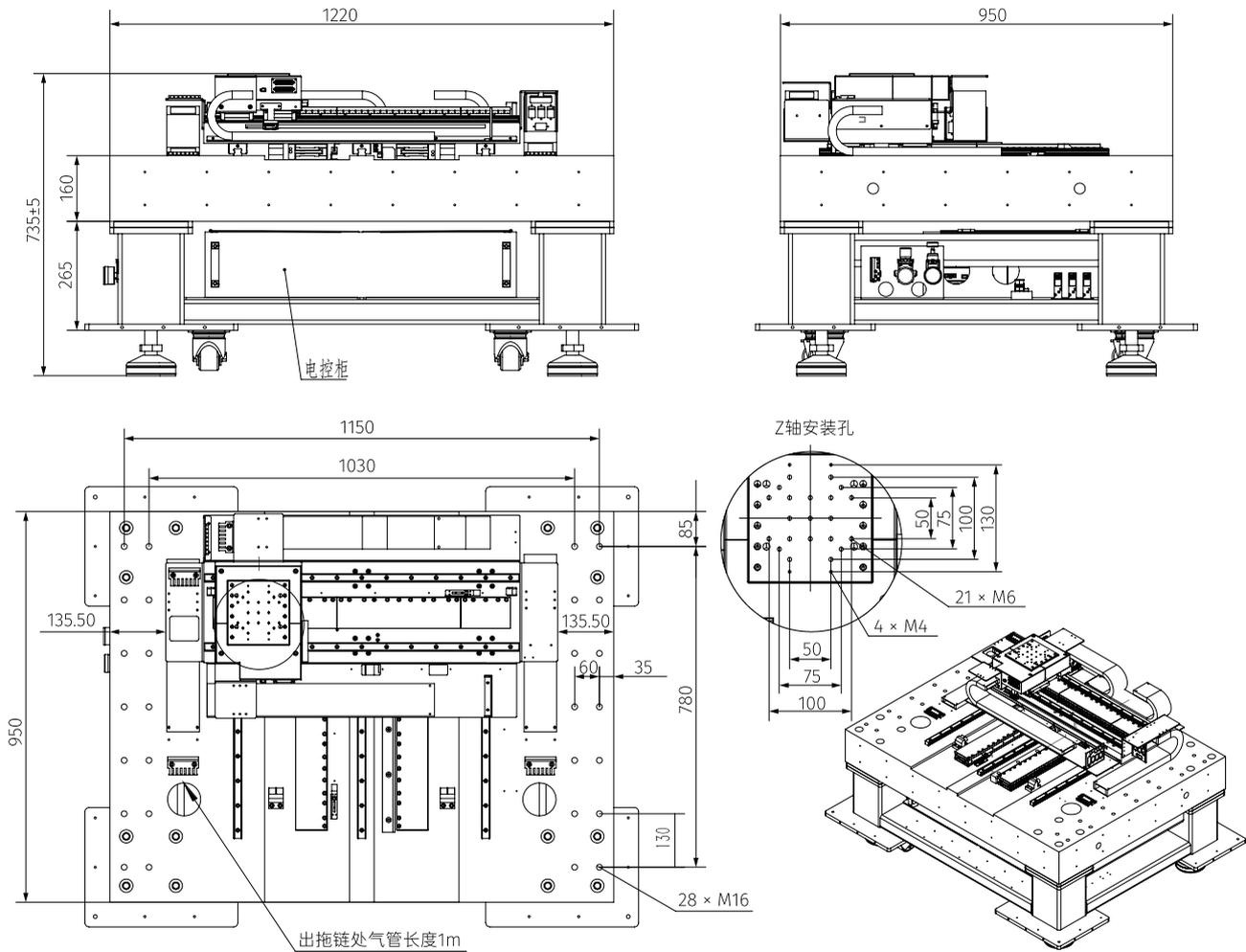
- Adopting XYZ stacking structure, ironless linear motor direct drive control, no cogging effect, smooth operation at low speeds (with small speed fluctuations)
- Equipped with a non-contact high-precision grating ruler, it has excellent dynamic performance, positioning accuracy, and repeated positioning accuracy. The movement is smooth and the force is stable
- XY axis stacked structure, using marble base, high stability, Z-axis direct drive horizontal lifting structure, directly moving load lifting, built-in balance cylinder, stroke 10mm

# XYZ AOI Testing Platform

PDM-X500-Y400-Z10-ZKHY specification



■ External dimensions



# LED chip inspection stage

## Parameter Table

Platform model	PDM-G5				
Axial	X0-axial	Y0-axial	Y1-axial	Z0-axial	Z1轴
Load	30 kg	12 Kg	40 kg	30 kg	12 kg
Positioning accuracy	+/- (3+L/250) μm	+/- 15 μm	+/- 10 μm	12 mm Minimum	12 mm Minimum
Trip	2050	Update to1400mm	194mm	-	-
Linear axis length	3140 mm	mm	mm	-	-
Sliding table length	890 mm	230 mm	mm	-	-
Resolution	5 nm or better	0.1μm or better	0.1μm or better	0.2 μm	0.2 μm
Acceleration	0.5G (Average)@ 66.7% Jerk	0.5G (Average)@ 66.7% Jerk	0.25G (Average)@ 66.7% Jerk	50 mm/sec^2	50 mm/sec^2
Speed	1000 mm/s(Max)	1000 mm/s (Max)	500 mm/s (Max)	-	-
Speed fluctuation	0.2% Max @Velocity = 400mm/s	-	-	-	-
Repeatability	+/-1 μm	+/-1 μm	+/-1 μm	+/- 1 μm	+/- 0.1 μm
Vertical straightness	+/-15 μm	+/-10 μm	+/- 12 μm over full range	-	-
Horizontal straightness	+/- 2 μm over 200mm +/- 15 μm over full range	+/-10 μm	+/- 10 μm	-	-
Setting time	200 msec @ 0.2μm p-p	200 msec @0.2μm p-p	200 msec @0.2μm p-p	-	-
X0Y0 orthogonal	20μm p-p		-	-	-

## Application scenarios

Suitable for the large panel wick detection industry

## Product Introduction

**Product Features**

- Precision linear guide rail
- Ironless motor
- Ultra high speed stability
- Balancing large travel, high precision, and heavy load
- Large detection area
- Multiple models can be customized from small to large generations

**Structural characteristics**

- Longmen structure, high stability
- Low Abbe error
- Compact platform structure with strong driving capability

**Customization**

It can be evaluated and customized according to customer needs such as configuration, itinerary, load, special structure, etc



# PCB board LDI exposure stage

## Parameter Table

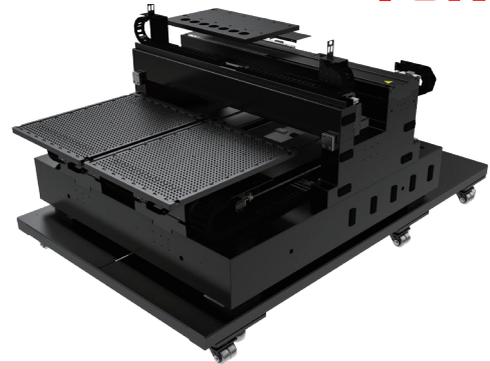
Platform model	PSW-K1195-X900-2Y1350-Z20			
Shafting	x-axis	Y1/Y2-axis	Z1/Z2-axis	K-axis
Trip	900 mm	1350 mm	20 mm	1195 mm
Load	120 kg	≥ 55KG+Z-axis weight	≥55KG	3(Side Hanging)
Encoder resolution	0.1 μm	0.1 μm	20 μm	0.1 μm
Minimum step	0.5 μm	0.5 μm		0.5 μm
Linear positioning accuracy	±2.5 μm	±2.5 μm	±15 μm	±2.5 μm
Bidirectional repeatability	±1.5 μm	±1.5 μm	±8 μm	±1.5 μm
Horizontal straightness	±8 μm	±5 μm	±5 μm	±10 μm
Vertical straightness	±12 μm	±12 μm	±5 μm	±10 μm
Yaw	5 arc sec	5 arc sec	20 arc sec	±15 μm
Pitch	10 arc sec	10 arc sec	X. A point 300mm away from the center in the Y direction, during a 20mm movement along the Z axis, Maximum error in Z direction ± 30um	-
Roll	10 arc sec	-	-	±10 μm
Yaw	±2.5 arc sec/50mm	-	-	-
Pitch	±5 arc sec/50mm	-	-	-
Y1 Y2, X verticality	4.1 arc sec (Converted to a jump of 10um in the micrometer)	-	-	-
Y1, Y2 parallelism	-	±3 μm	-	-
Maximum speed	500	500 mm/s	15 mm/s	500 mm/s
Maximum acceleration			5000 mm/s <sup>2</sup>	
Setting time for ± 0.5um	<0.1/50mm <0.1/700mm at 500mm/s 0.5G acceleration, 50000 acceleration, under hanging load conditions	<0.1S/1mm	-	<0.1/50mm <0.1/700mm Under the conditions of 500mm/s, 0.5G acceleration, 50000 acceleration, and hanging load
Position threshold		<0.1S/500mm		
Speed stability	-	<1% (50 ~500mm/s)	-	-
Verticality of K-axis and Y-axis	-	-	-	4.1 arc sec (Converted to a jump of 10um in the micrometer)

## Application scenarios

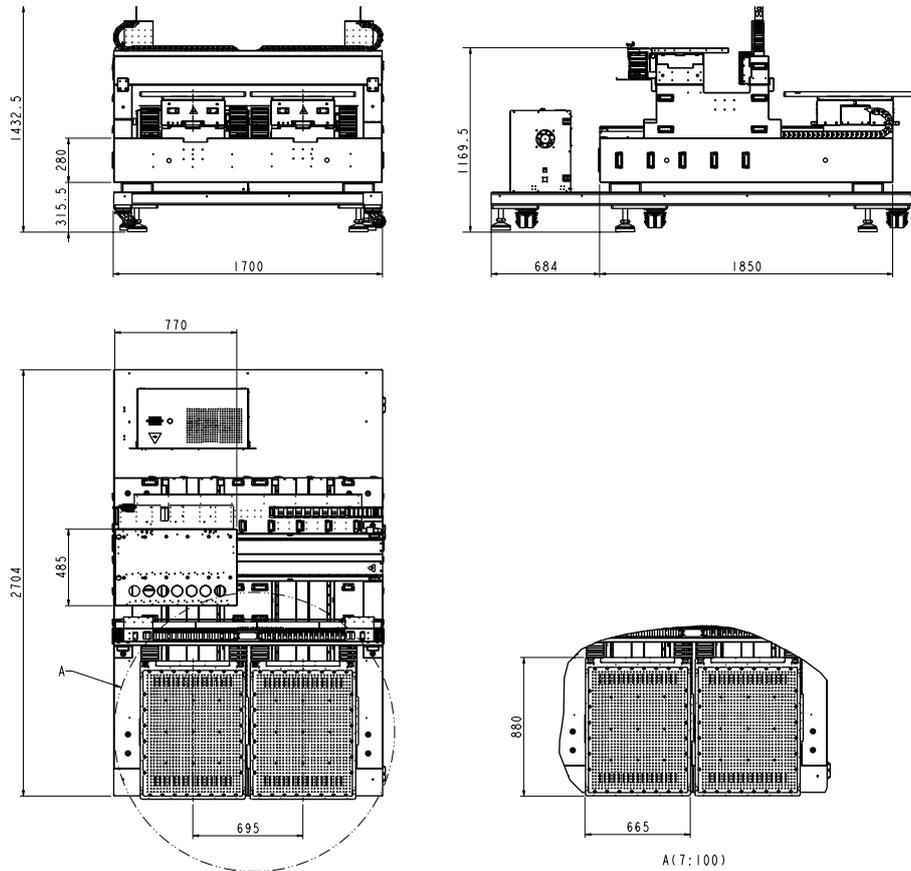
Mainly used in semiconductor production lines, microelectronics production, LCD displays High precision and efficiency are required in industrial projects such as LCD displays, circuit board production, and PCB products

# PCB board LDI exposure platform

PSW-K1195-X900-2Y1350-Z20 specifications



## External dimensions



## Product Introduction

### Product Features

- High precision and high stability direct drive structure design
- Non contact high-precision grating ruler
- Adopting high-precision linear guide rails
- The itinerary, size, and cables can be customized according to customer requirements

### Customization

It can be evaluated and customized according to customer needs such as configuration, itinerary, load, special structure, etc

### Structural characteristics

- The seven axis LDI exposure machine adopts ironless linear motor direct drive control, without cogging effect, and can operate smoothly at low speeds (with small speed fluctuations)
- Equipped with a non-contact high-precision grating ruler, it has excellent dynamic performance, positioning accuracy, and repeatability accuracy
- Seven axis LDI exposure machine adopts high-precision grating position feedback
- The repeatability of the entire journey is less than  $\pm 1.5\mu\text{m}$
- Positioning accuracy less than  $\pm 2.5\mu\text{m}$
- Positioning accuracy less than  $\pm 2.5\mu\text{m}$

# IC carrier board LDI exposure air-floating stage

## Parameter Table

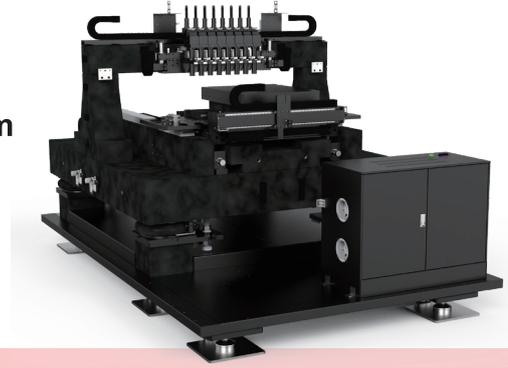
Platform model	PDM-2K600-Z10-X160-Y1350-LDI						
Axial	x-axis	Y-axis	Z-axisXY On the platform	Mounted on the Z-axis crossbeam	Z-axis on the K-axis	K1/K2 axis	Small X-axis
Trip	160mm	1350 mm	10 mm	10 mm	20 mm	800 mm	700 mm
Form	-	-	-	Dual motor dual grating	-	-	-
Load	≥ Z-axis+10kg	≥10 Kg	≥10 KG	≥30 KG	≥3KG	3 (Side Hanging) +Small Z-axis	3 (Side Hanging)
Encoder resolution	0.05μm	0.05 μm	-	0.1 μm	20 μm	0.1 μm	0.1 μm
Minimum step	0.5 μm	0.25 μm	20 μm	0.5 μm	20 μm	0.5μm	0.5μm
Linear positioning accuracy	1 μm	1 μm	6 μm	5 μm	6 μm	4 μm	4 μm
Bidirectional repeatability	0.5 μm	0.5 μm	4 μm	3 μm	4 μm	2 μm	2μm
Maximum speed	300 mm/s	300 mm/s	15 mm/s	-	-	8 μm	8μm
Maximum acceleration	0.2 mm/s <sup>2</sup>	2000 mm/s <sup>2</sup>	-	-	-	8 μm	8μm
+Setting time for 0.5um	<0.1S/1 mm	<0.1S/1 mm	-	-	-	-	-
Position threshold (s)	<0.1S/150 mm	<0.1S/500 mm	-	-	-	-	-
Speed stability	-	<0.5% (30~300mm/s)	-	-	-	-	-
Controller PSO □	-	Resolution of 0.05 μ m	-	-	-	-	-
	-	Pulse output frequency ≥2.4MHz	-	-	-	-	-
Bidirectional straightness	-	-	-	3 μm	-	-	-
Horizontal straightness	-	-	8 μm	8 μm	8 μm	-	-
Vertical straightness	-	-	8 μm	8 μm	8 μm	-	-
Yaw	-	-	8 arc sec	2.5 arc sec	10 arc sec	6 arc sec	6 arc sec
Pitch	-	-	8 arc sec	8 arc sec	10 arc sec	8 arc sec	8 arc sec
Roll	-	-	-	-	-	8 arc sec	8 arc sec
Maximum speed	-	-	15 mm/s	15 mm/s	15 mm/s	500 mm/s	500 mm/s
Maximum acceleration	-	-	-	-	-	4000 mm/s <sup>2</sup>	4000 mm/s <sup>2</sup>
Verticality (orthogonality) of K1, K2 axes and Y-axis	-	-	-	-	-	3 arc sec	-
						<0.1/50mm	
Setting time for ± 0.5um	-	-	-	-	-	<0.1/700mm at 500mm/s, 0.5G acceleration, 50000+acceleration, under hanging load conditions	
Position threshold	-	-	-	-	-		
Verticality of small X-axis and Y-axis	-	-	-	-	-	-	3 arcsec
Orthogonality with the K-axis	-	-	-	-	20 arc sec	-	-

## Application scenarios

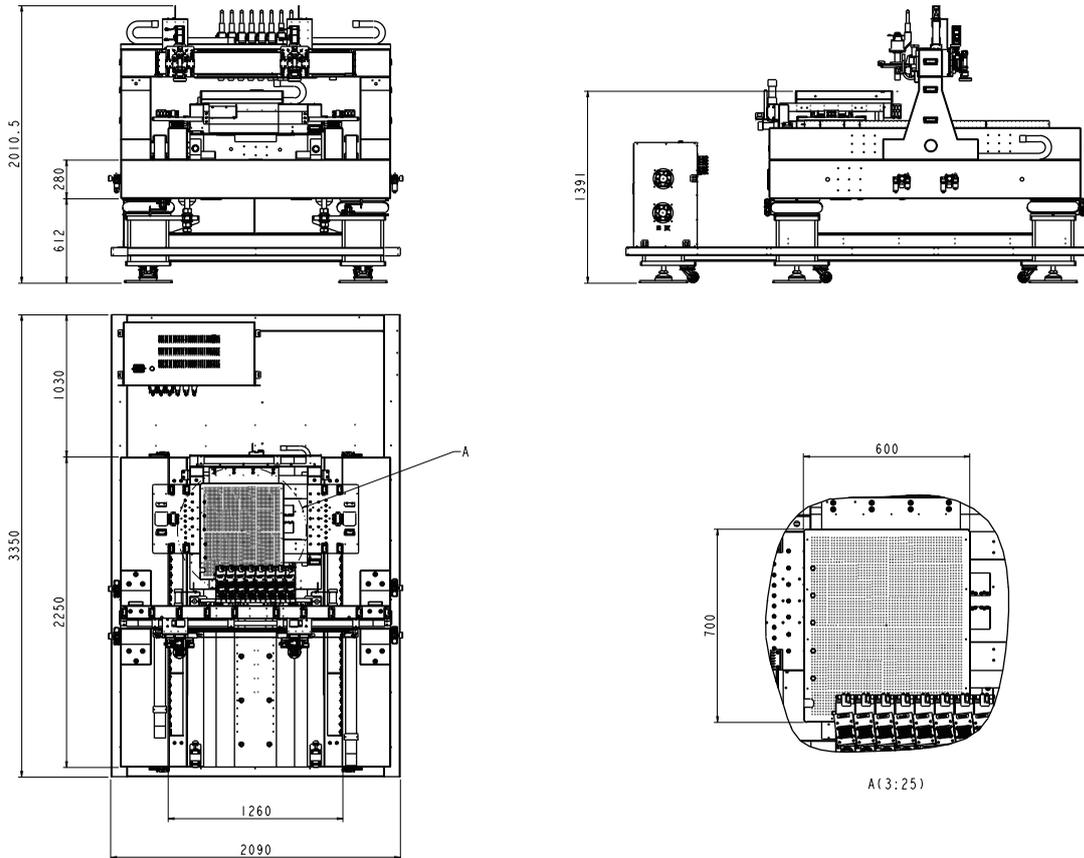
Mainly used in semiconductor production lines, microelectronics production, LCD displays LCD displays, circuit board production, PCB products, and other industrial projects require high precision and efficiency.

# IC carrier board LDI exposure air flotation platform

## PDM-2K600-Z10-X160-Y1350-LDI specifications



### External dimensions



### Product Introduction

#### Product Features

- High dynamic performance
- XY adopts a fully enclosed air floating guide rail with good stability
- High precision zero expansion grating feedback is selected, with a low expansion coefficient and minimal influence from temperature drift
- Z-axis uses magnetic springs to balance the load, customizable
- The itinerary, size, and cables can be customized according to customer requirements

#### Customization

It can be evaluated and customized according to customer needs such as configuration, itinerary, load, special structure, etc

#### Structural characteristics

- Multi axis air floating platform, using air floating XY stacking structure
- Hanging K-axis and Z-axis on the side of the crossbeam (mechanical guide rail)
- Direct drive control of ironless linear motor without cogging effect
- Smooth operation at low speeds (with minimal speed fluctuations)
- Equipped with a non-contact high-precision grating ruler, it has excellent dynamic performance, positioning accuracy, and repeatability accuracy
- Selection of high-precision grating position feedback for multi axis air flotation platform
- The repeatability of the entire journey is less than 0.5um,
- The positioning accuracy is less than 1um.

# Wafer cutting stage

## Parameter Table

Platform model	PDM-X400-Y600	
Axial	x-axis	Y-axis
Effective stroke	400 mm	600 mm
Repeatability	≤±1 μm	
Compensation based positioning accuracy	≤±1μm	
Horizontal straightness	≤± 1 μ m (1.5 μ m/within 200 strokes in the middle)	
Vertical straightness	≤±1.5μm	≤±1.5μm
Verticality between XY	≤5μm	
Maximum speed	1000mm/s	300mm/s
Maximum acceleration	2 G	0.5 G
Load	25kg	
Line length	Outside the drag chain3m	
Motor parameters		
Cooling method	Self cooling	water-cooling
Continuous thrust	722.6 N	1159.3 N
Peak thrust	1610.5 N	
Force constant ± 10%	153.0 N/Arms	
Reverse electromotive force constant+10%	124.9 Vpeak/(m/s)	
Motor constant @ 25	58.2 N/Sqrt (W)	
Interphase resistance @ 25	4.6 Ω	
Interphase inductance ± 30%	116.0 mH	
Persistent current	4.8 Arms	8.2 Arms
Peak current	14.4 Arms	
Continuous thermal power	204.9 W	597.9 W
Thermal dissipation constant	2.8 W/ °C	8.0 W/ °C

## Application scenarios

Suitable for various semiconductor industries such as wafer slicing and wafer inspection

## Product Introduction

**Product Features**

- Precision linear guide rail
- Ultra high straightness
- Open structure, low lateral height
- Better geometric performance and higher load-bearing capacity

**Structural characteristics**

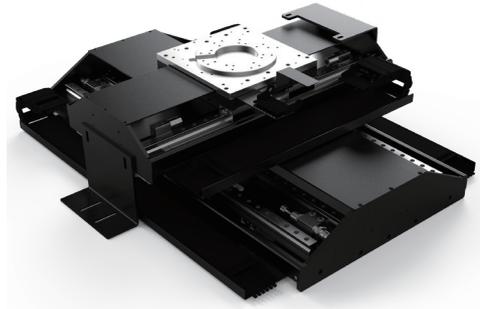
- XY integrated design direct drive platform
- Horizontal straightness less than ± 1μm
- Equipped with auxiliary functions such as centralized oil injection and metal grounding

**Customization**

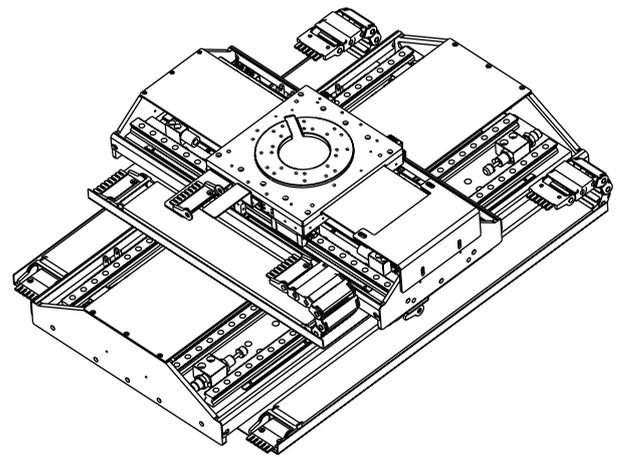
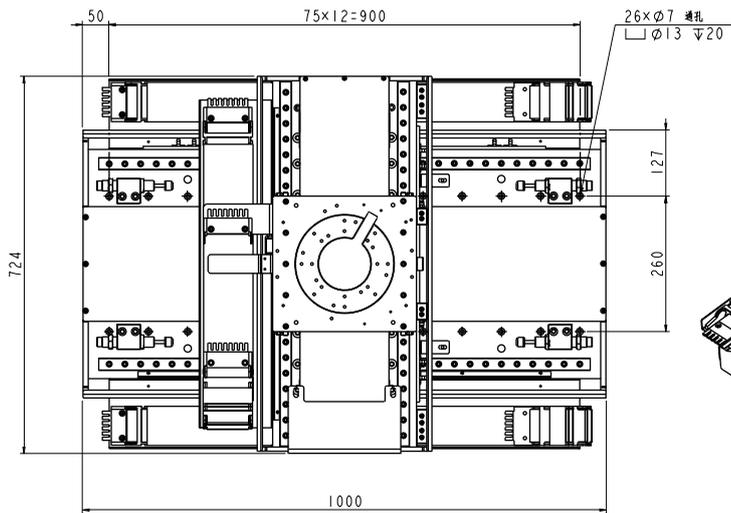
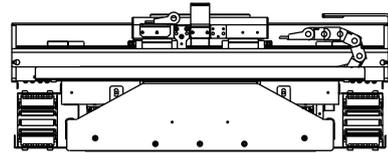
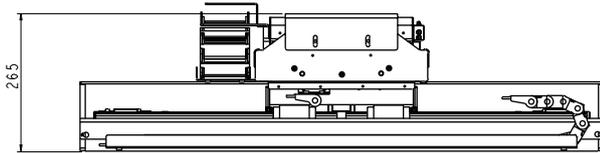
It can be evaluated and customized according to customer needs such as configuration, itinerary, load, special structure, etc

# Wafer cutting platform

## PDM-X400-Y600 specifications



■ External dimensions



# Laser film removal stage

## Parameter Table

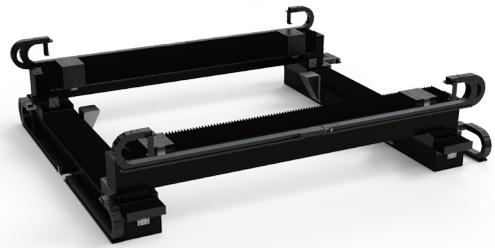
Platform model	PDM-X2830-TY3104	
	x-axis	Y-axis
Trip	2830 mm	3104 mm
Load	Y load+Y self weight+100kg	80Kg
Maximum speed	1m/s	1m/s
Maximum acceleration	0.5g	0.5g
Repeatability	±5µm	±5µm
Compensation based positioning accuracy	±12µm	±12µm
Sports mode	Move 300mm in 0.5 seconds, stay for 1.5 seconds, cycle motion	Move 300mm in 0.5 seconds, stay for 1.5 seconds, cycle motion
Motor model	P8-H150-6	P3-H75-2
Winding code	T	S
Maximum thrust	7605 N	1044 N
Continuous thrust	3582 N	374 N
Maximum power	22815 W	1566 W
Continuous Power	10746 W	566 W
Positive suction force	11700 N	1746 N
Maximum current	43.56 Arms	10.3 Arms
Continuing current	14.52 Arms	3.28 Arms
Force constant	246.69 N/Arms	113.68 N/Arms
Line back electromotive force coefficient	101.57 Vpeak/m·s <sup>-1</sup>	100.36 Vpeak/m·s <sup>-1</sup>
Line resistance	2.22 Ohms	8.58 Ohms
Line inductance	66 mH	47.2 mH
Time constant	29.73 ms	5.5 ms
Motor constant	135.19 N/√W	32.12 N/√W
Maximum coil temperature	130 °C	130 °C
Maximum terminal voltage	600 VDC	310 VDC
Coil length	532 mm	193 mm
Coil quality	30.3 kg	2.8 kg
Magnetic track quality	15.1 kg/m	6.6 kg/m
pole pitch	42 mm	25 mm

## Application scenarios

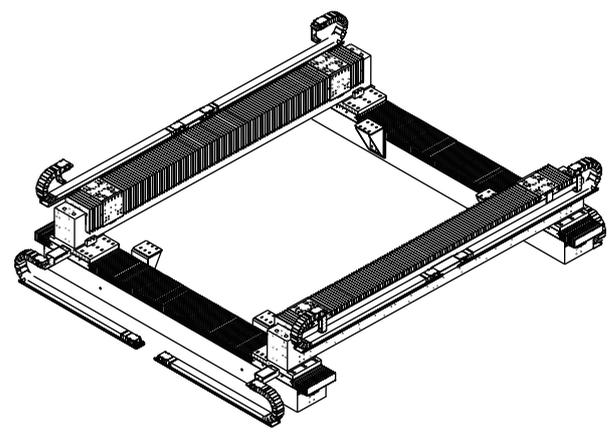
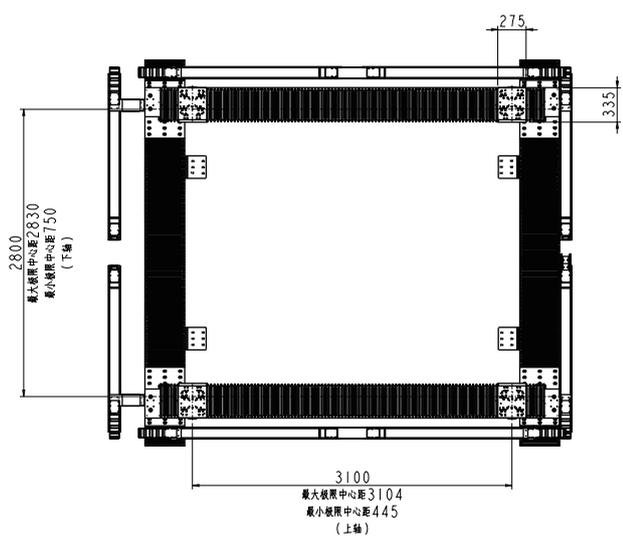
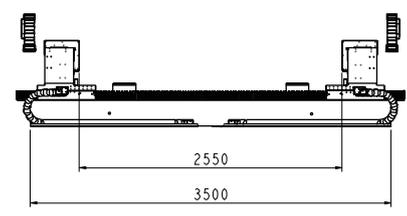
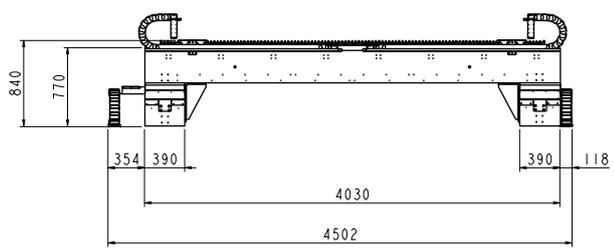
Suitable for ultra large format laser film removal platform

# Laser film removal platform

## PDM-X2830-TY3104 specifications



### External dimensions



### Product Introduction

**Product Features**

- Ultra large thrust linear motor
- Resolve the deformation of over 3m long crossbeam spans
- Speed up to 1m/s

**Structural characteristics**

- Ultra long crossbeam dual drive platform
- Rectangular layout, wider work area
- The dynamic gantry structure is more stable

**Customization**

It can be evaluated and customized according to customer needs such as configuration, itinerary, load, special structure, etc

# Air-floating gantry marble stage

## Parameter Table

Platform model	PDM-2Y800-SQ
Axial	Y-axis (lower axis)
Travel	810 mm (effective travel 770 mm)
Load	110Kg
Maximum speed	0.5m/s
Maximum acceleration	0.5g
Horizontal straightness	±2.5 μm
Vertical straightness	±2.5 μm
Repeatability	±2 μm
Compensation based positioning accuracy	±5μm
Deviation (aw)	±3 arc sec
Pitch	±3arc sec
Sports mode	Move 300mm in 0.5 seconds, stay for 1.5 seconds, cycle motion
Motor model	PU-30B-4
Winding code	S
Maximum thrust	1152 N
Continuous thrust	204 N
Maximum power	1728 W
Continuous Power	306 W
Positive suction force	0 N
Maximum current	14.3 Arms
Continuing current	2.54 Arms
Force constant	80.6 N/Arms
Line back electromotive force coefficient	6 Vpeak/m·s <sup>-1</sup>
Line resistance	13.2 Ohms
Line inductance	4.28 mH
Time constant	0.33 ms
Motor constant	15.69 N/√W
Maximum coil temperature	130 °C
Maximum terminal voltage	310 VDC
Coil length	241 mm
Coil quality	0.8 kg
Magnetic track quality	17.5 kg/m
Pole pitch	30 mm

## Application scenarios

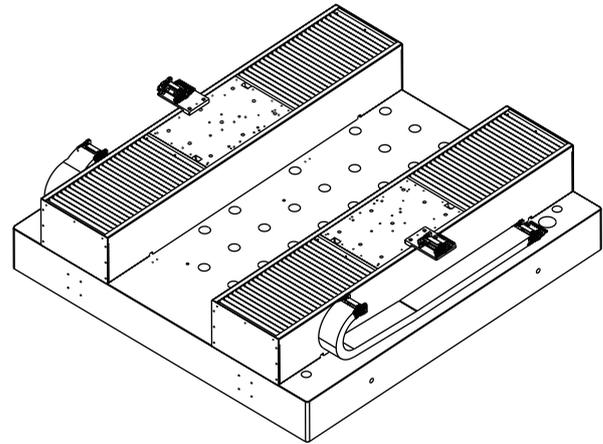
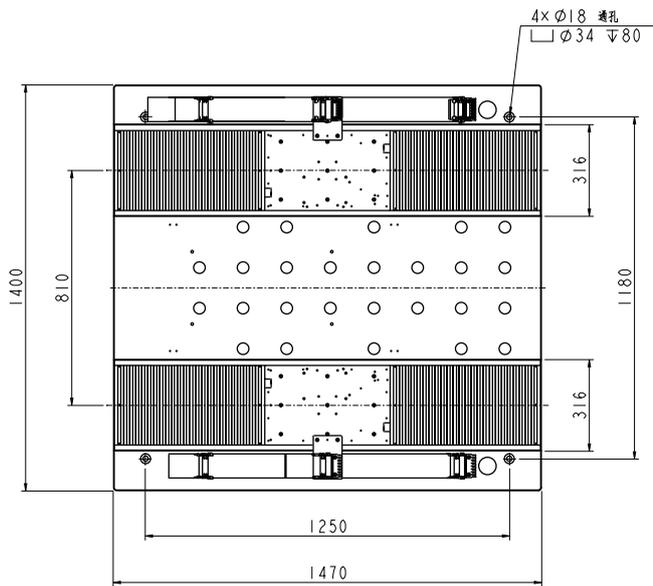
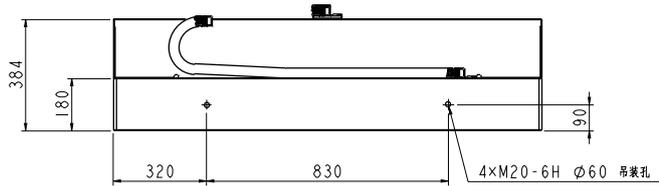
Suitable for the photovoltaic coating industry

# Air floating gantry marble platform

## PDM-2Y800-SQ specifications



### External dimensions



### Product Introduction

#### Product Features

- Using air floating guide rails
- Ultra high straightness
- Speed fluctuation can reach 0.1% @ 40mm/s

#### Structural characteristics

- Dual drive layout can be paired with bilateral Z-axis for use
- Compact platform structure with strong driving capability

#### Customization

It can be evaluated and customized according to customer needs such as configuration, itinerary, load, special structure, etc

# Hollow precision bonding positioning stage

## Parameter Table

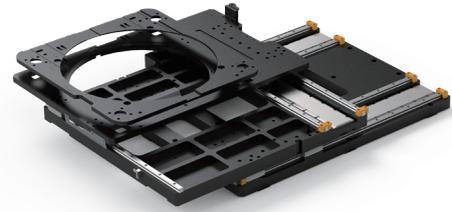
Platform model	PM-X340-Y420-RB0.5		
<b>mechanical parameters</b>			
Load	kg		30
Trip	mm	X.340 Y.420	
Resolution	μm		0.5
Positioning accuracy	μm		10
Repeatability	μm		±3
Horizontal straightness	μm		10
Vertical straightness	μm		10
Installation method		level	
<b>Motion Parameters</b>			
Speed	m/s		1
Acceleration	mm/s <sup>2</sup>		20
Stop time	s		0.09
<b>Accessory</b>			
Encoder	PCS		2
Photoelectric switch	PCS		2
Rail	PCS		7
Drag chain	PCS		2
<b>Motor parameters</b>			
Motor model		P3-H55-3	
Continuous thrust	N		413
Peak thrust	N		1113
Persistent current	Arms		3.23
Peak current	Arms		8.68
Base material		aluminium	
Matrix flatness		20 μm	

## Application scenarios

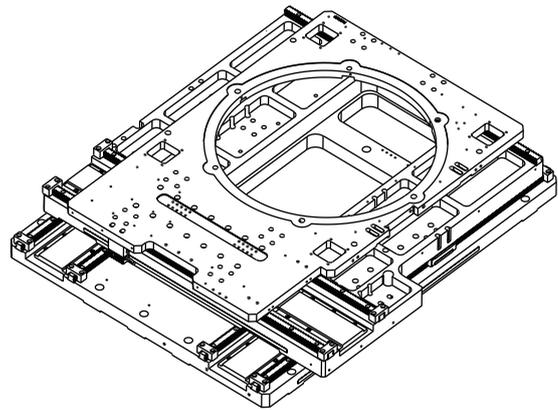
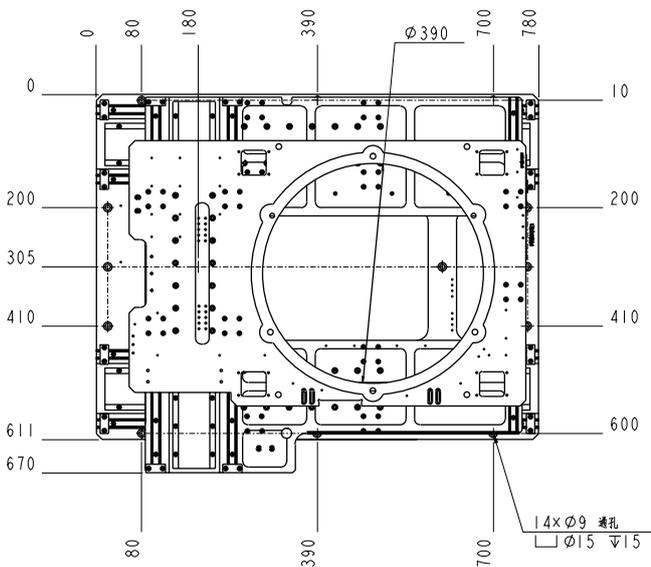
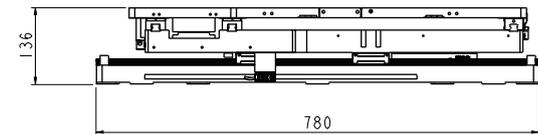
This platform is a precision motion table with a hollow structure, featuring large-sized through holes and high dynamic performance to meet wafer mounting and inspection applications. It is also suitable for other high-end manufacturing industries such as CCD imaging and LED packaging inspection

# Hollow precision solidification positioning platform

PM-X340-Y420-RB0.5 specifications



## Specifications



## Product Introduction

Product Features

- Stacked layout
- Compact hollow structure
- Adopting high-precision linear guide rail
- High dynamic performance, high precision
- The Y-axis is driven by a dual drive linear motor
- The itinerary, size, and cables can be customized

Structural characteristics

- Adopting a compact hollow outer structure with stacked layers
- The working point position is lowered, and the grating feedback position is close to the working surface, which is crucial in wafer inspection. The Y-axis is driven by a dual drive linear motor
- Can provide high thrust, speed of 1m/s, and accurate positioning

Customization

It can be evaluated and customized according to customer needs such as configuration, itinerary, load, special structure, etc

# Gantry dual-drive precision dispensing stage

## Parameter Table

Platform model	PDM-X200-TY400-DN	
<b>Motor parameters</b>		
Axial	x-axis	Y1Y2-axis
Motor model	PU-30A-4-S-5M-HALL	PU-30A-4-S-5M-HALL
Continuous thrust	104 N	104 N
Peak thrust	576 N	576 N
Persistent current	2.54 Arms	2.54 Arms
Peak current	14.3 Arms	14.3 Arms
<b>Mechanical parameters</b>		
Axial	X-axis	Y1Y2-axis
Effective stroke	200 mm	400 mm
Load	35 kg	35 kg+X-axis
Speed	200mm/s	200 mm/s
Repeatability	±0.5 μm	±0.5 μm
Positioning accuracy	±1 μm	±1μm

## Application scenarios

The gantry dual drive platform is a high-precision Cardil dual drive gantry system, with superior performance used in high-precision and high-efficiency industrial projects such as surface mount machines, scanning processing, automated assembly, and visual observation

## Product Introduction

Product Features

- Communication brushless dual drive gantry structure
- High repeatability positioning accuracy
- Maximum speed exceeding 2m/s, acceleration exceeding 2G
- High dynamic performance, high precision
- Z-axis/rotation axis can be configured according to customer requirements
- The itinerary, size, and cables can be customized according to customer requirements

Structural characteristics

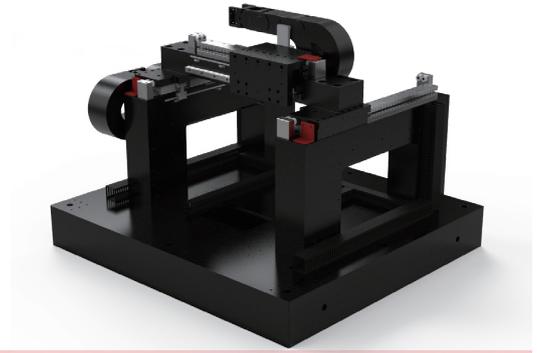
- Adopting ironless linear motor and equipped with non-contact grating ruler
- The repeatability of the entire journey is less than ± 0.5um
- Positioning accuracy less than ± 1um
- Has excellent dynamic performance and positioning accuracy.
- The gantry shaft adopts a dual direct drive structure, which has strong driving capability
- The crossbeam shaft adopts a single linear motor structure to achieve high-speed scanning

Customization

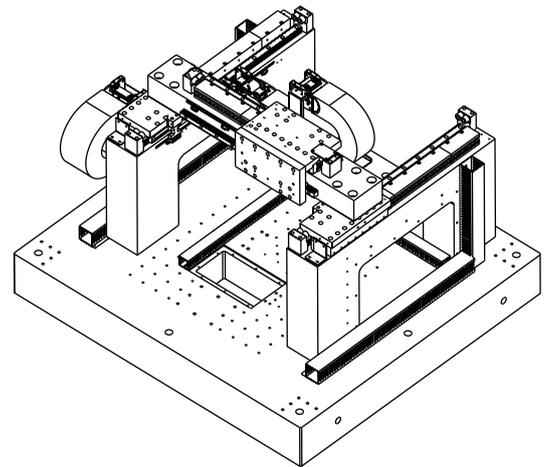
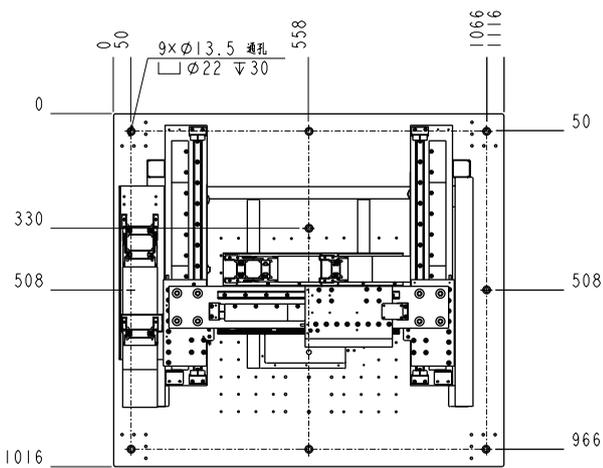
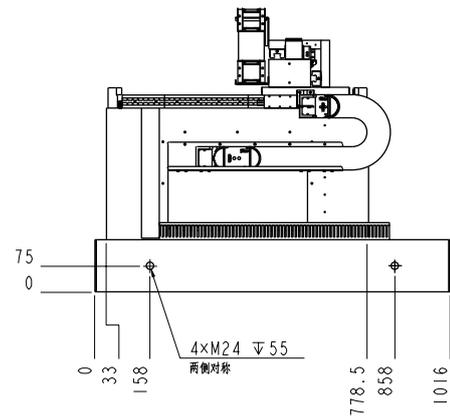
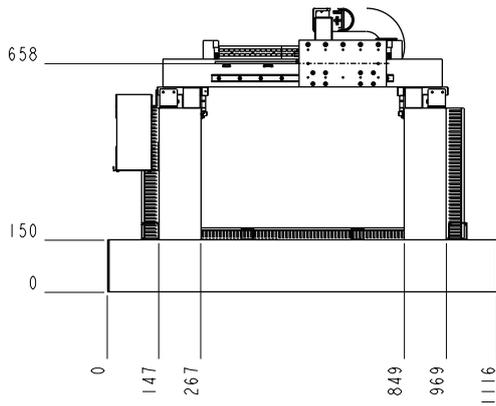
It can be evaluated and customized according to customer needs such as configuration, itinerary, load, special structure, etc

# Longmen dual drive precision dispensing platform

PDM-X200-TY400-DN specifications



■ External dimensions



# Lithium battery welding stage

## Parameter Table

Platform model	PM-X860-Y700-RB0.1		
<b>mechanical parameters</b>			
Load	kg	X=Z+15	Y=35
Trip	mm	X=860	Y=700
Resolution	μm	0.1	
Positioning accuracy	μm	±2	
Repeatability	μm	±1	
Parallelism	μm	±4	
Vertical straightness	μm	±4	
<b>Motion Parameters</b>			
Speed	m/s	0.8	
Acceleration	mm/s <sup>2</sup>	10	
Stop time	s	0.5	
<b>accessory</b>			
Driver	PCS	3	
Encoder	PCS	3	
Photoelectric switch	PCS	9	
Rail	PCS	6	
<b>Motor parameters</b>			
Motor model	P3-H55-2		
Continuous thrust	N	276	
Peak thrust	N	742	
Persistent current	Arms	3.23	
Peak current	Arms	8.68	
Base material	marble		

## Application scenarios

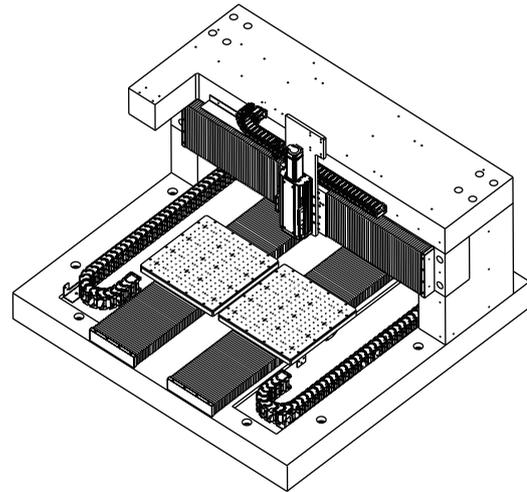
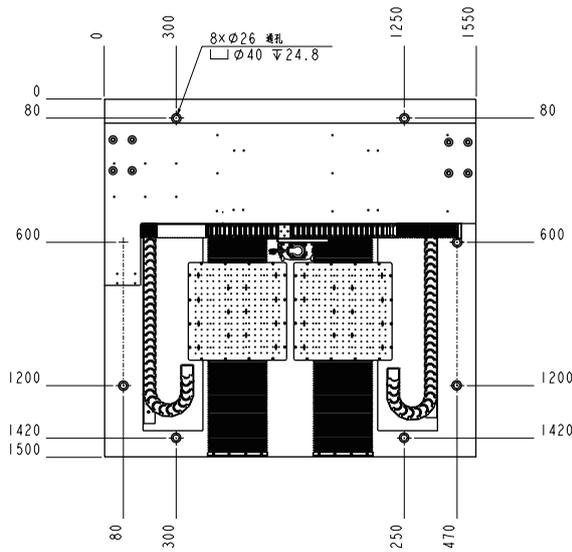
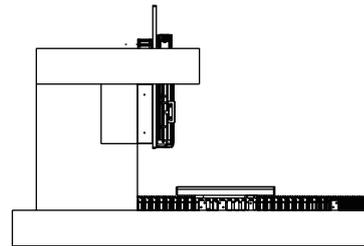
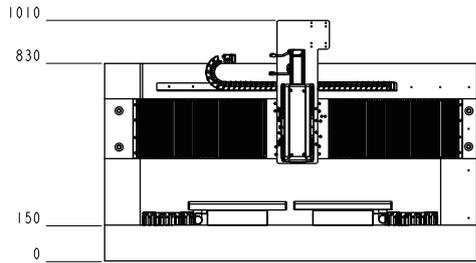
This platform is mainly used for lithium battery welding and laser cutting platforms

# Lithium ion welding platform

## PM-X860-Y700-RB0.1 specifications



### External dimensions



### Product Introduction

#### Product Features

- Fixed beam gantry structure
- Marble base
- Adopting high-precision linear guide rail
- High dynamic performance, high precision
- Multiple X axes can be added, and the Y-axis stroke, size, and cables can be customized

#### Structural characteristics

- The X double Y fixed gantry platform is a linear motor platform
- Marble gantry structure design, with good rigidity and high stability
- Multiple X axes can be added to the marble base
- The Y-axis stroke of the gantry frame can be customized to improve work efficiency

#### Customization

It can be evaluated and customized according to customer needs such as configuration, itinerary, load, special structure, etc

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