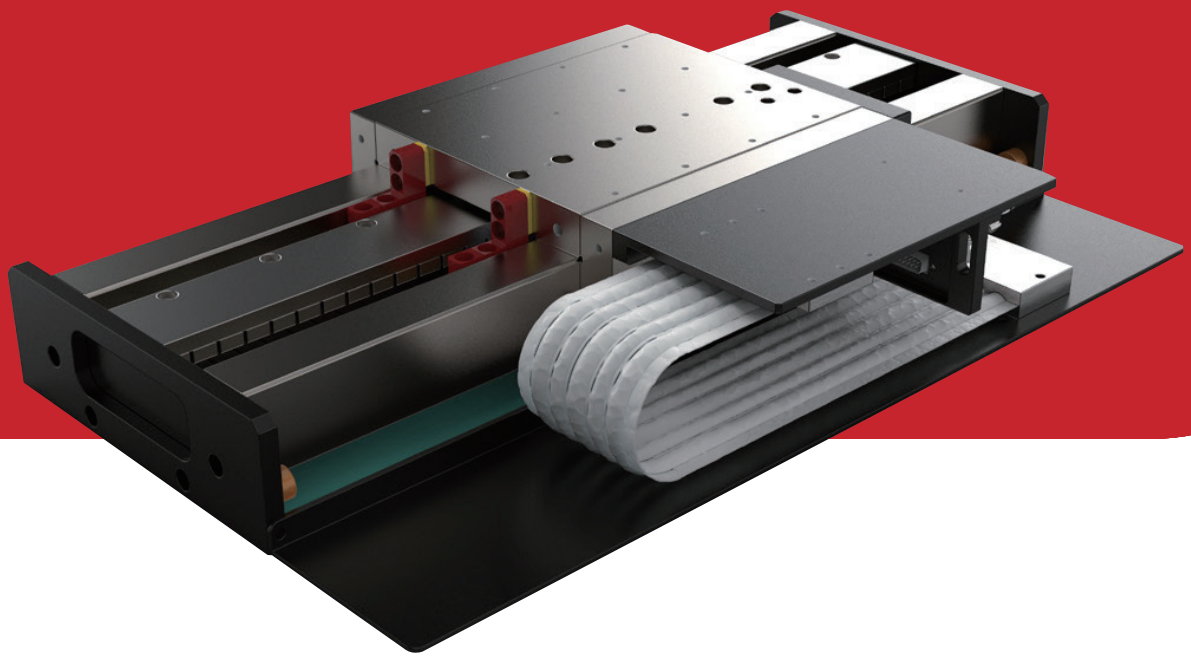
www.tokkrobot.com



TOKK®

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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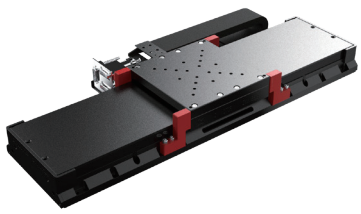

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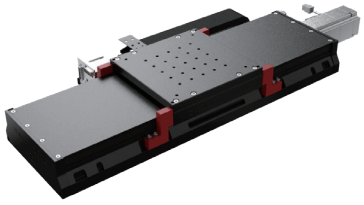

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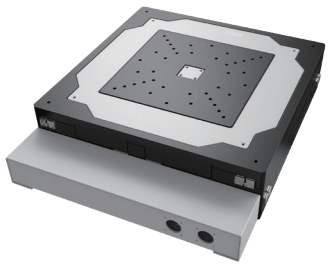

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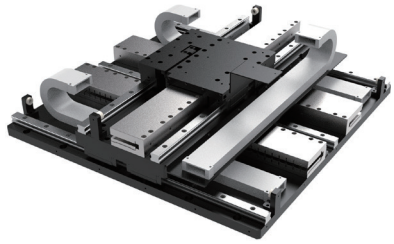

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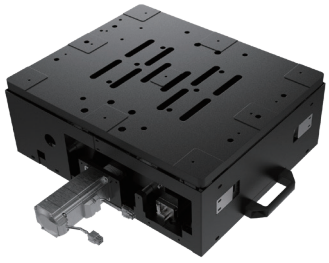

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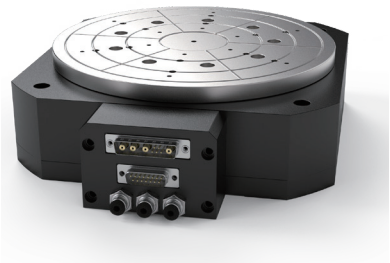

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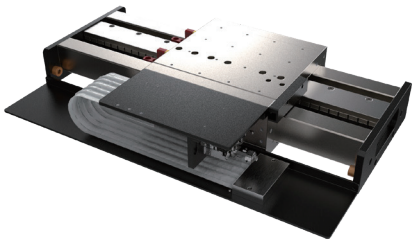
10 Air floating single axis platform



PLAM215 series
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PLAM215-200
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PLAM215-400
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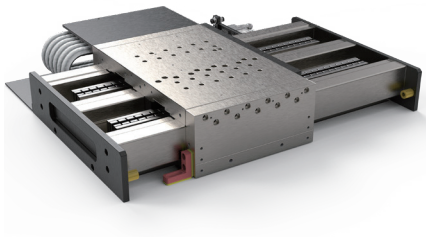
11 Air floating single axis platform



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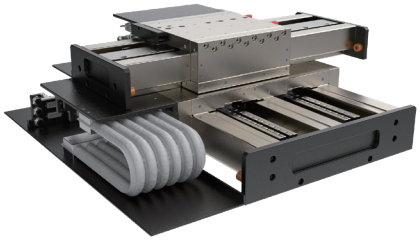

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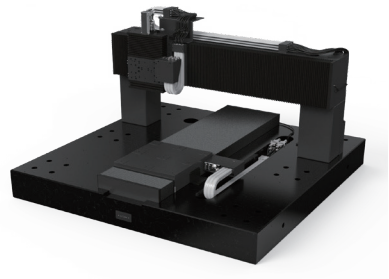

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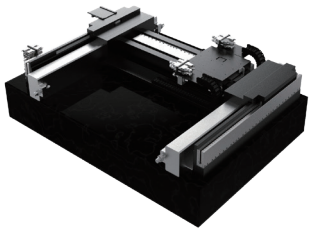

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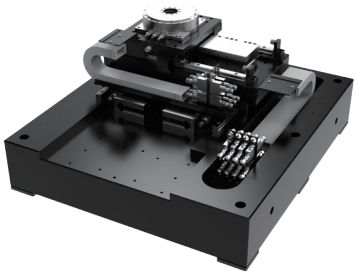

PDM-X160-Y160-R30-AOIMJ

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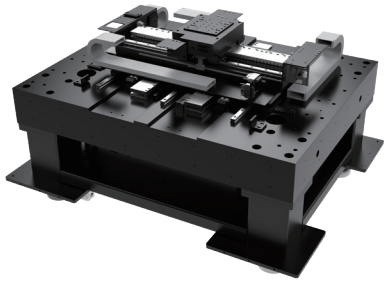

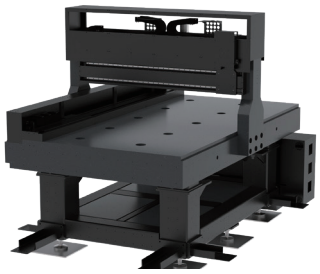

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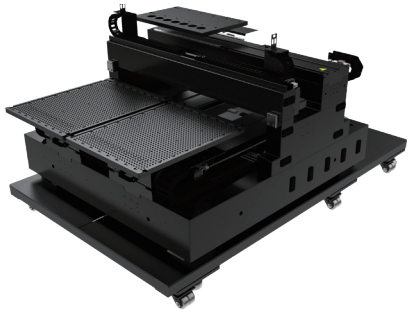

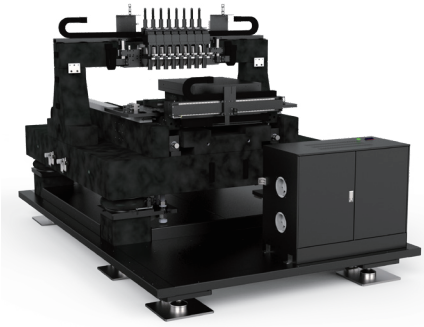

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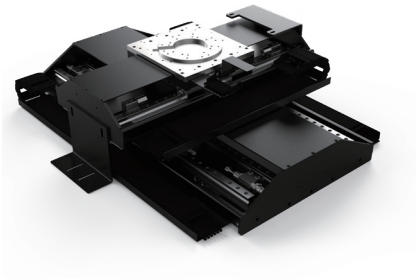
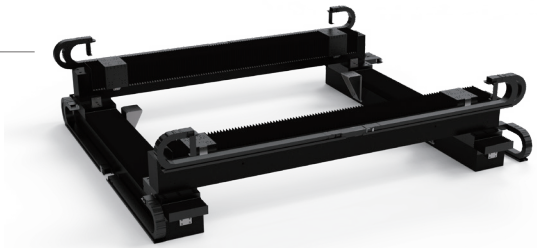
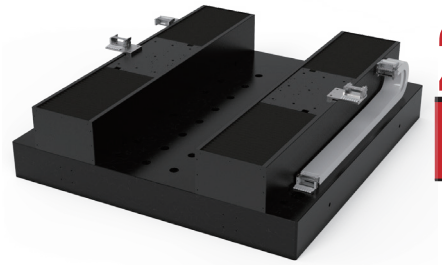
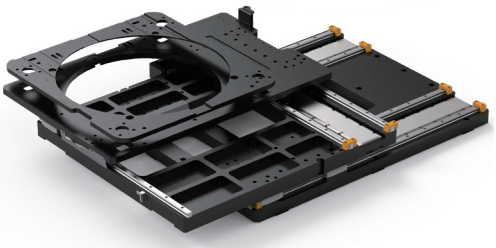
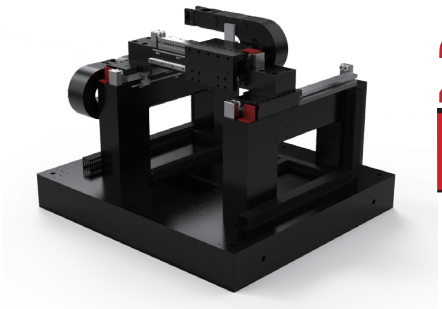
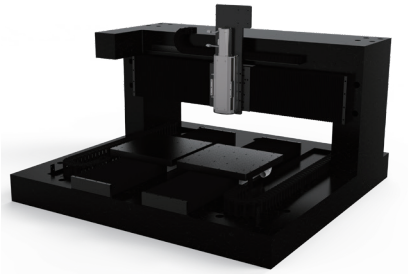












COMPANY PROFILE

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

unit：mm	
100	200
300	400
500	

Cable Management

Single side drag chain plate Single drag chain	L1
Bilateral drag chain plate Double drag chain	L2

Feedback options

VPP1 volt sine analog input	AS
High precision VPP1 volt sine analog input	ASH
1nm resolution digital TTL signal input	TTLO01
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

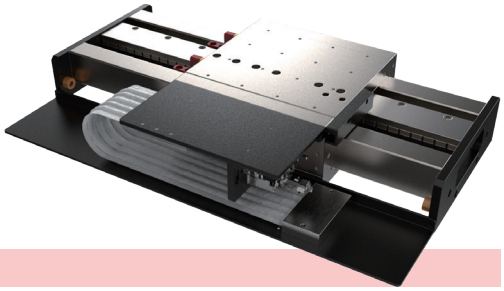
Application can better ensure the normal air gap of the air guide rail

Customization

Larger itinerary can be customized

Air floating single axis platform

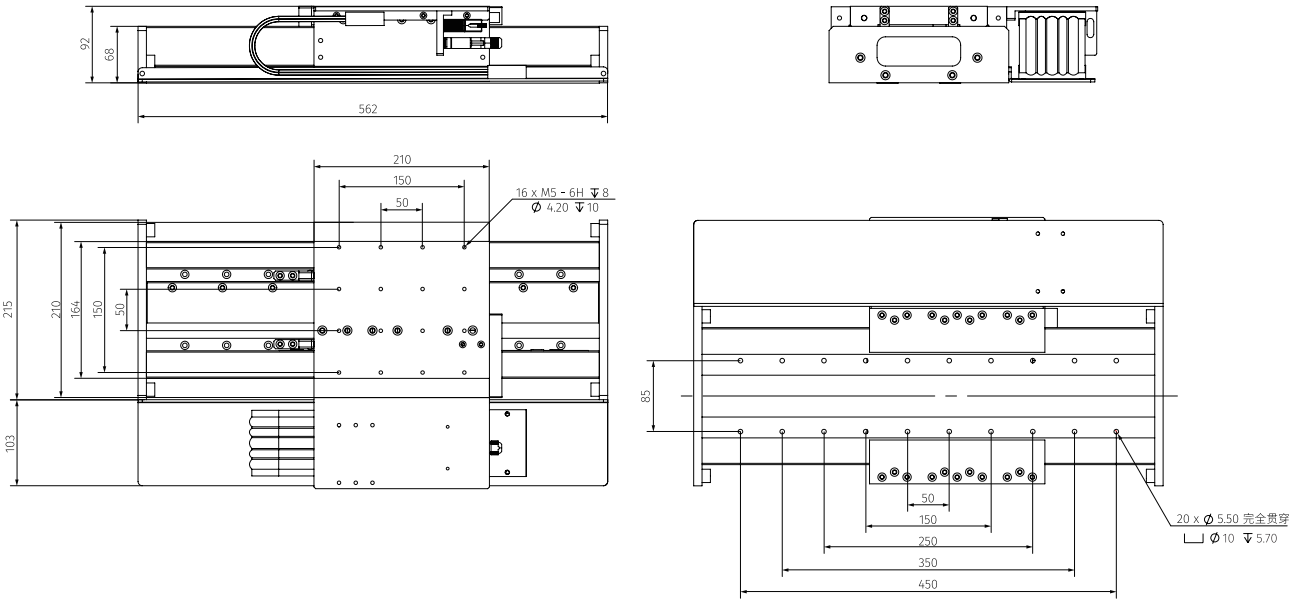
PLAM215 series



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

Trip

unit：mm	
100	200
300	400
500	

Cable Management

Single side drag chain plate Single drag chain	L1
Bilateral drag chain plate Double drag chain	L2

Feedback options

VPP1 volt sine analog input	AS
High precision VPP1 volt sine analog input	ASH
1nm resolution digital TTL signal input	TTLO01
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

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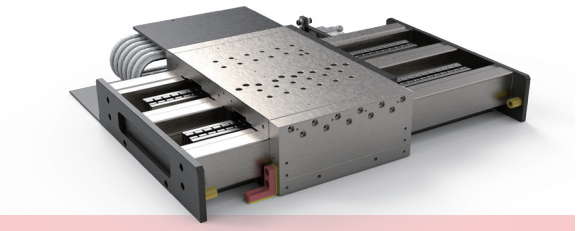
Application can better ensure the normal air gap of the air guide rail

Customization

Larger itinerary can be customized

Air floating single axis platform

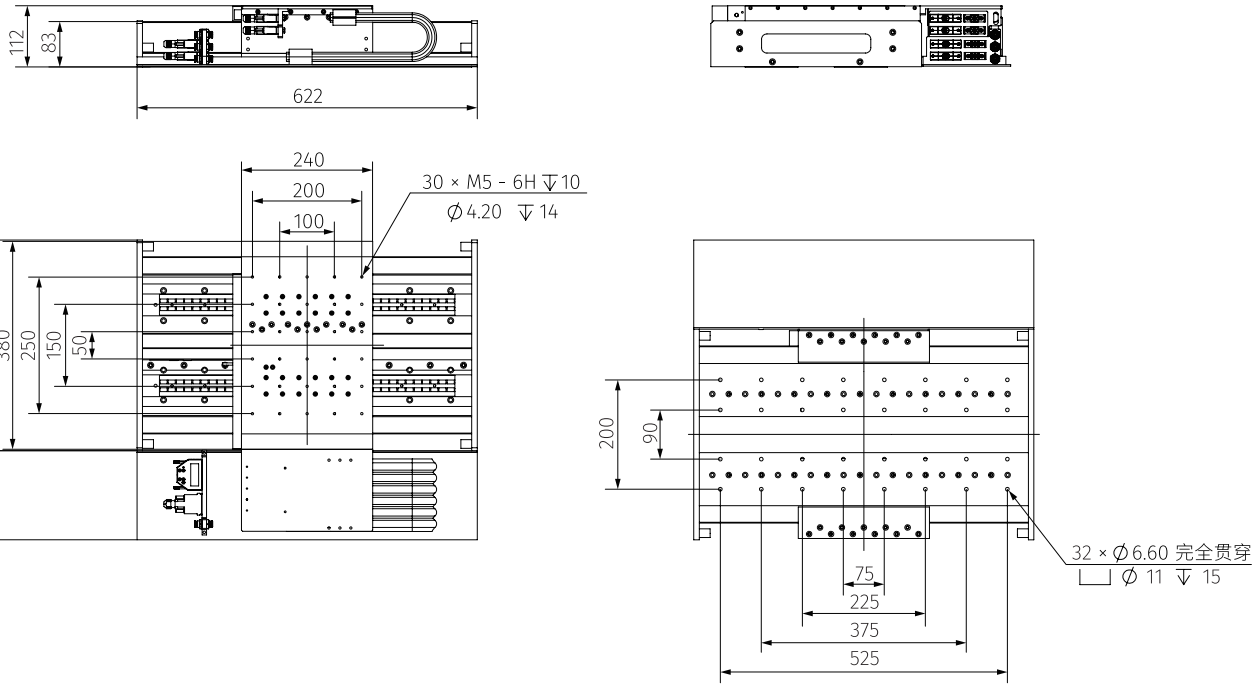
PLAM385 series



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	
100	200
300	400
500	

Single side drag chain plate Single drag chain	L1
Bilateral drag chain plate Double drag chain	L2

VPP1 volt sine analog input	AS
High precision VPP1 volt sine analog input	ASH
1nm resolution digital TTL signal input	TTLO01
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

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·Can be used as a single axis or combined with other axes to form a multi axis system

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·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

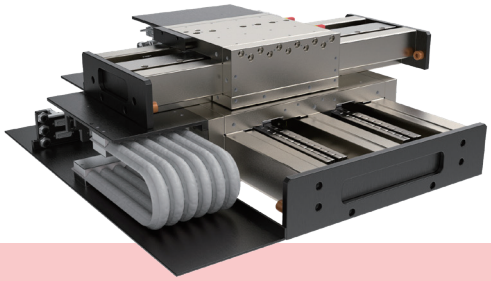
Application can better ensure the normal air gap of the air guide rail

Customization

Larger itinerary can be customized

Overlay air flotation platform

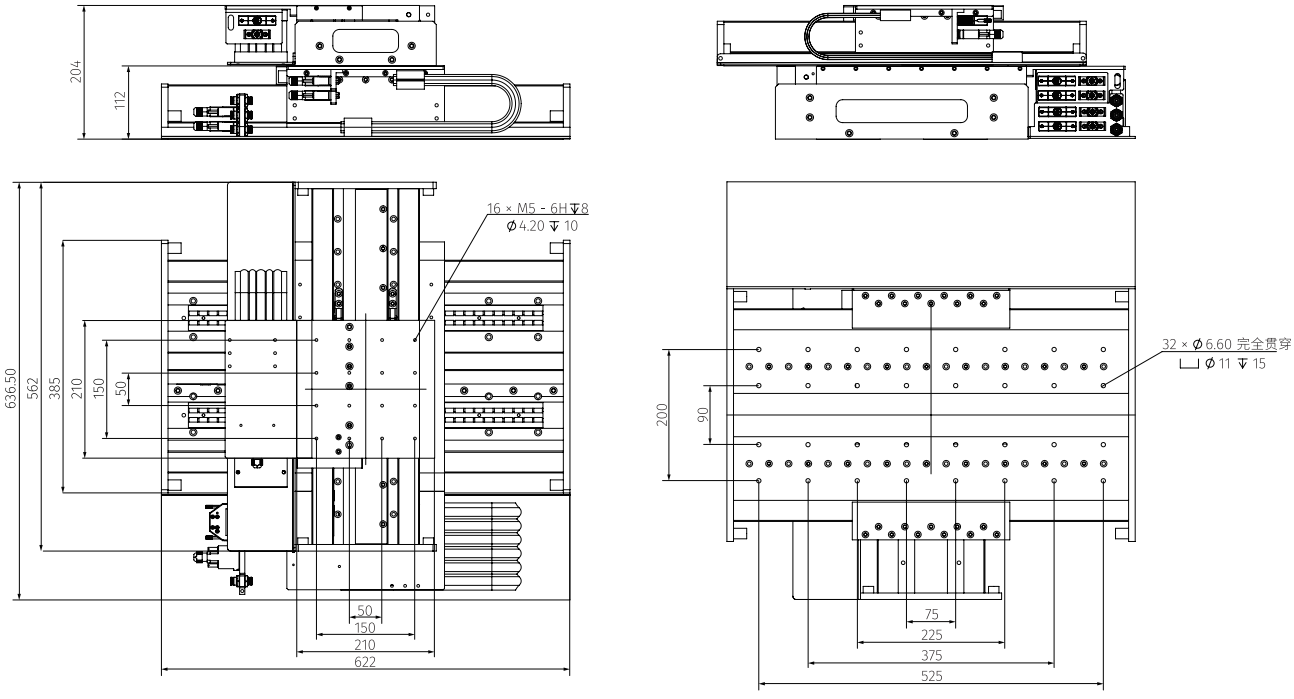
PLAM-XY series



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 YT	0.1um resolution digital input SZ	Single side drag chain plate Single drag chain L1
	50 100	Customer customized loading platform DT	Analog input MN	Bilateral drag chain plate Double drag chain L2
	150 200			
	250 300			
	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

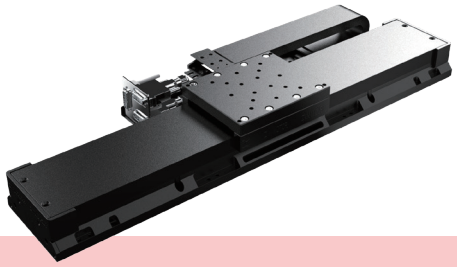
- Driven by a linear motor
- Fast speed
- Good dynamic performance
- Low friction force
- Easy to achieve precise position control
- Very suitable for applications with large travel, high precision, and high speed

Customization

Larger itinerary can be customized

Single axis precision linear platform

PM115LS specification

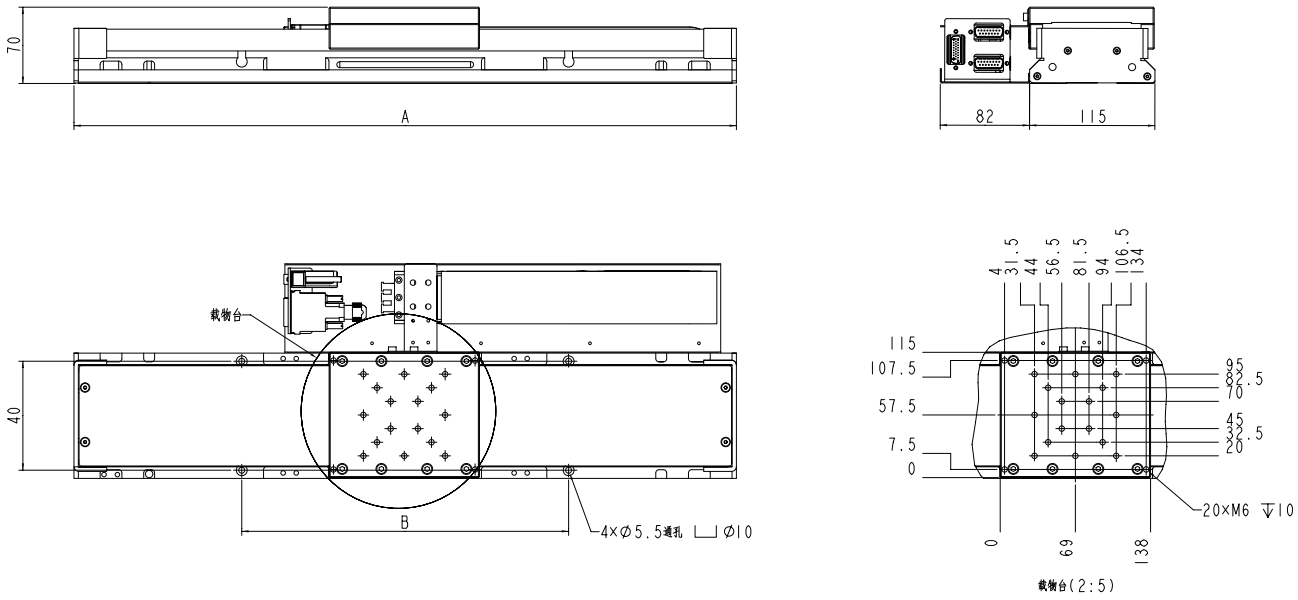


Parameter Table

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					

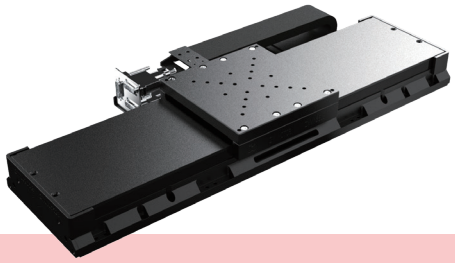
Note: The above test data was obtained from a linear amplifier in a laboratory environment, with the test point located 25mm above the center point

Overall dimension



Single axis precision linear platform

PM165LS specification

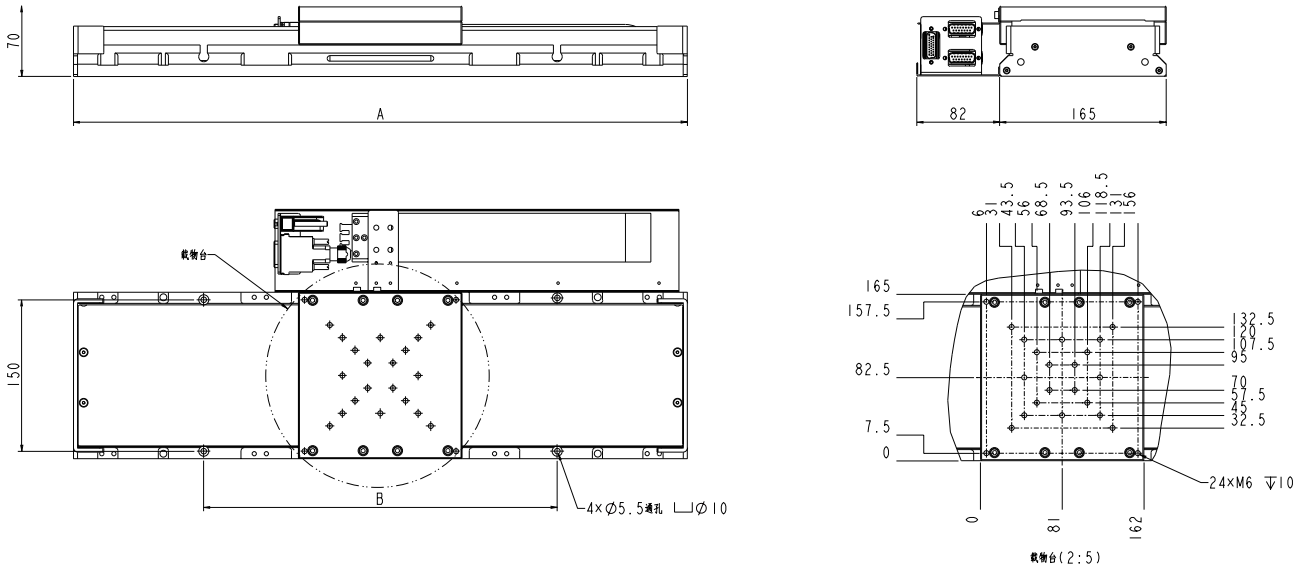


Parameter Table

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							

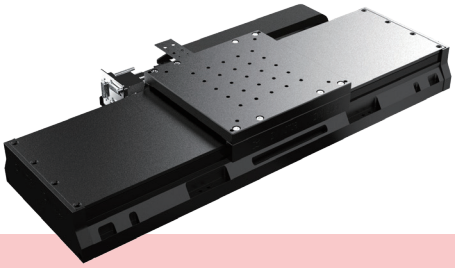
Note: The above test data was obtained from a linear amplifier in a laboratory environment, with the test point located 25mm above the center point

Overall dimension



Single axis precision linear platform

PM190LS specification

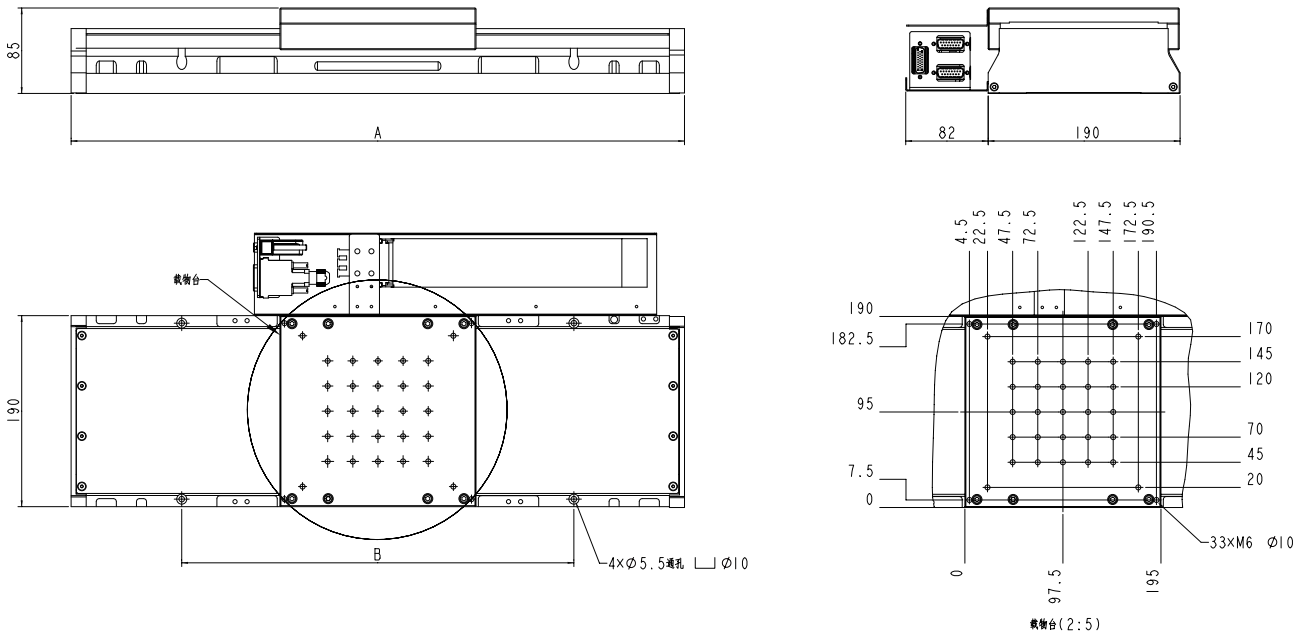


Parameter Table

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 μm	±1 μm	±1 μm	±1 μm	±1.5 μm	±1.5 μm
Bi directional repetitive positioning accuracy	±0.3μm	±0.4 μm	±0.4 μm	±0.4 μm	±0.4 μm	±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							

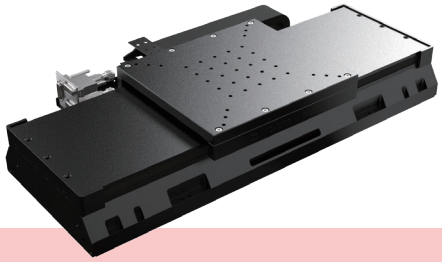
Note: The above test data was obtained from a linear amplifier in a laboratory environment, with the test point located 25mm above the center point

Overall dimension



Single axis precision linear platform

PM225LS specification

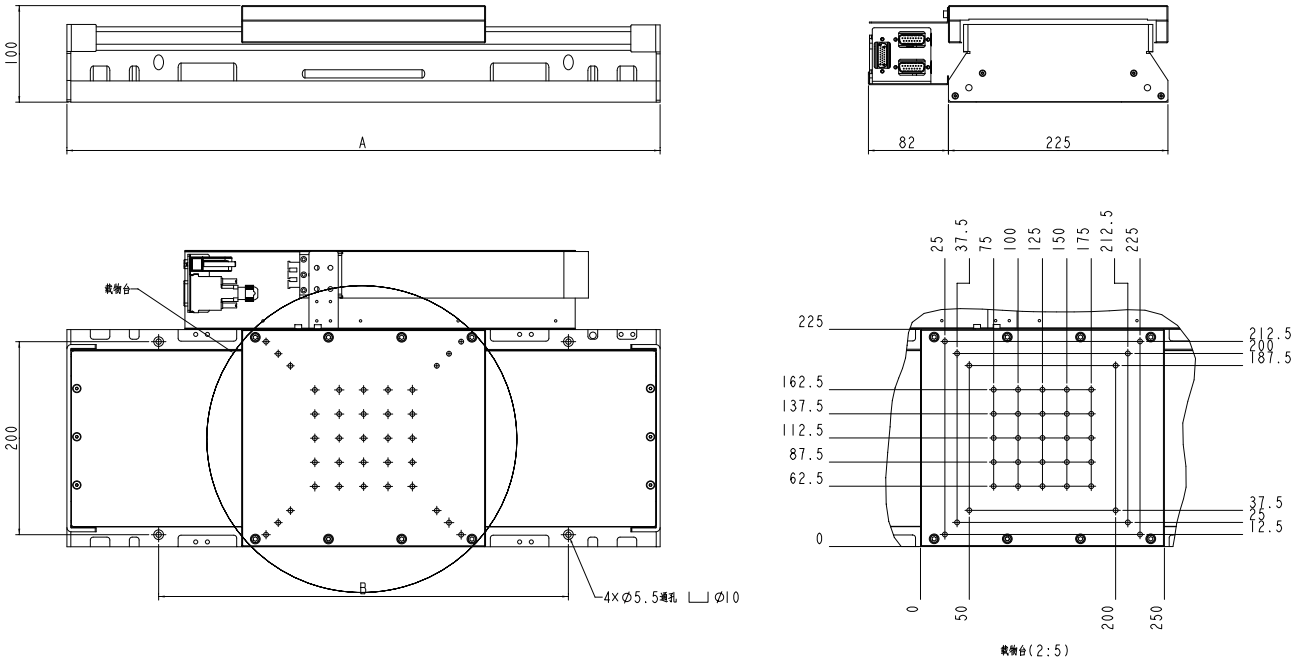


Parameter Table

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 μm	±1 μm	±1 μm	±1 μm	±1 μm	±1.5 μm	±1.5 μm
Bi directional repetitive positioning accuracy	±0.3 μm	±0.4 μm	±0.4 μm	±0.4 μm	±0.4 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							

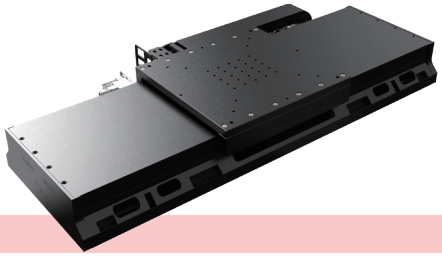
Note: The above test data was obtained from a linear amplifier in a laboratory environment, with the test point located 25mm above the center point

Overall dimension



Single axis precision linear platform

PM280LS specification

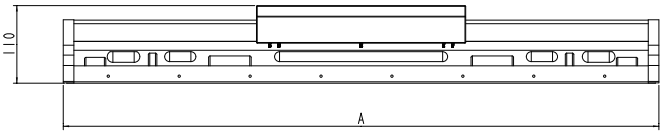


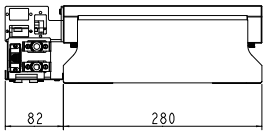
Parameter Table

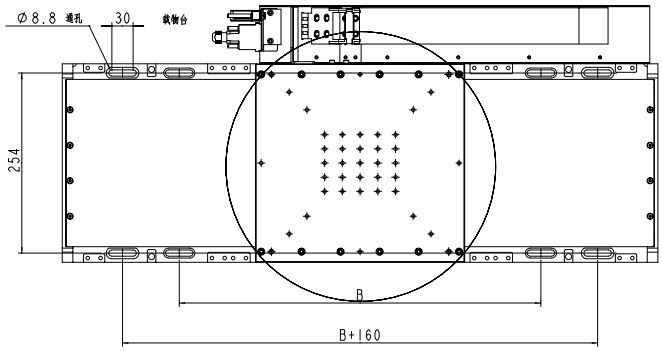
Platform model	PM280LS-300	PM280LS-400	PM280LS-500	PM280LS-600	PM280LS-700	PM280LS-800
Effective stroke	300 mm	400 mm	500 mm	600 mm	700 mm	800 mm
positioning accuracy	±1 μm	±1 μm	±2 μm	±2 μm	±2 μm	±2 μm
Bi directional repetitive positioning accuracy	±0.5 μm	±0.5 μm	±0.6 μm	±0.6 μm	±0.6 μm	±0.8 μm
pitch	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					

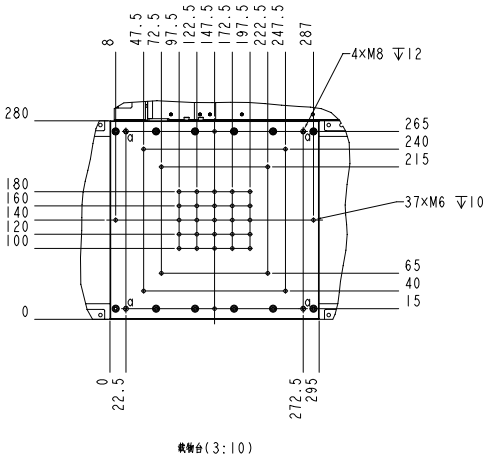
Note: The above test data was obtained from a linear amplifier in a laboratory environment, with the test point located 25mm above the center point

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

Trip (unit: mm)

50	400
100	500
150	600
200	700
250	800
300	1000

Platform options

Original factory standard installation hole position	YT
Customer customized loading platform	DT

Feedback options

0.1um resolution digital input	SZ
Analog input	MN

Cable Management

Single side drag chain plate Single drag chain	L1
Bilateral drag chain plate Double drag chain	L2

Motor options

200W motor	M200
200W motor with brake	M200S
400W motor	M400
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

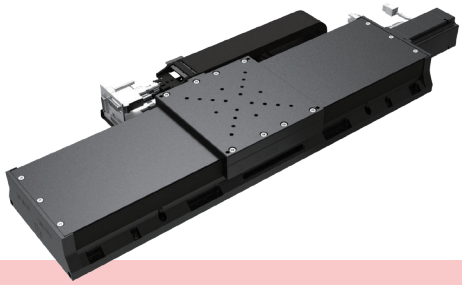
·Can be used in conjunction with the PM series

Customization

Larger itinerary can be customized

Single axis precision screw platform

PS115LS series specifications

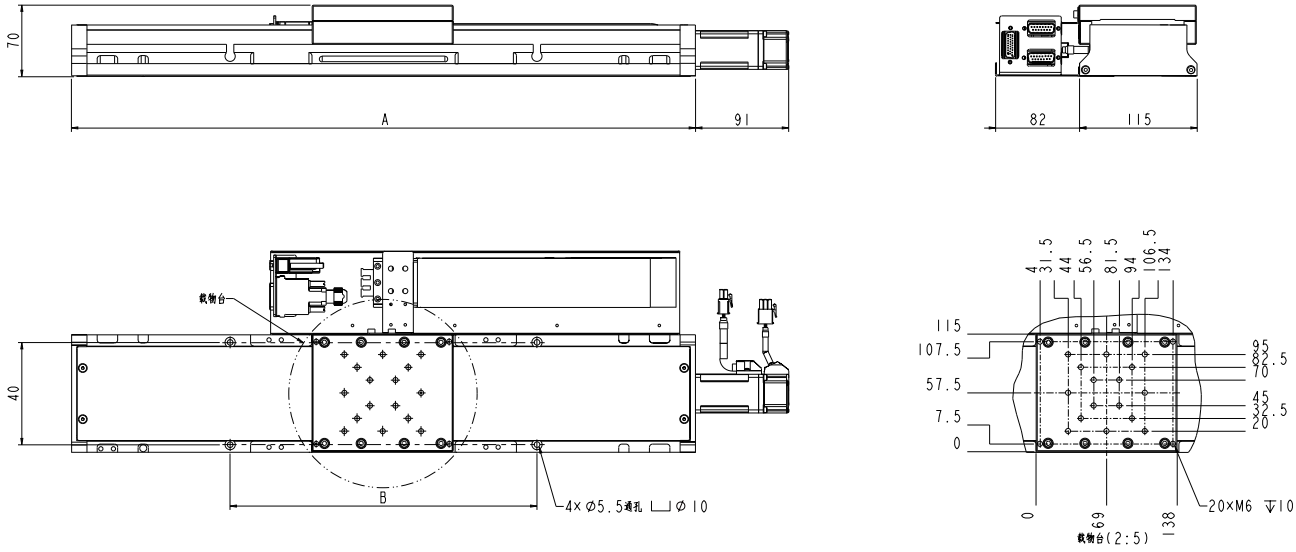


Parameter Table

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	±0.8μm	±1μm	±1μm	±1.5μm	±1.5μm	±1.5μm
	Rotary encoder	±1μm	±1μm	±1μm	±1.5μm	±1.5μm	±1.5μm
Bi directional repetitive positioning accuracy	Grating ruler	±0.3μm	±0.3μm	±0.35μm	±0.4μm	±0.45μm	±0.5μm
	Rotary encoder	±0.6μm	±0.8μm	±0.8μm	±1μm	±1μm	±1μm
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		±2μm	±2.5μm	±3μm	±3.5μm	±4μm	±4.5μm
resolution	Grating ruler	1nm，100nm，0.1μm					
	Rotary encoder	23bit					
Maximum Load	Horizontal placement	40kg					
	Vertical placement	20kg					
Minimum step quantity		100nm，0.1μm					
Platform quality		5.1kg	5.7kg	6.2kg	6.8kg	7.4kg	8.1kg
Platform material		Aluminium					
mean time between failures		27000 Hours					

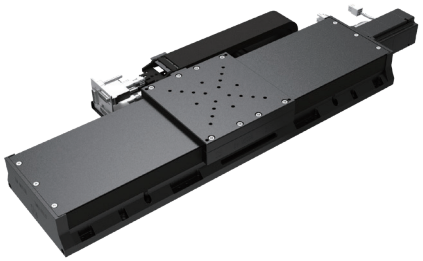
Note: The above test data was obtained from a linear amplifier in a laboratory environment, with the test point located 25mm above the center point

Overall dimension



Single axis precision screw platform

PS165LS series specifications

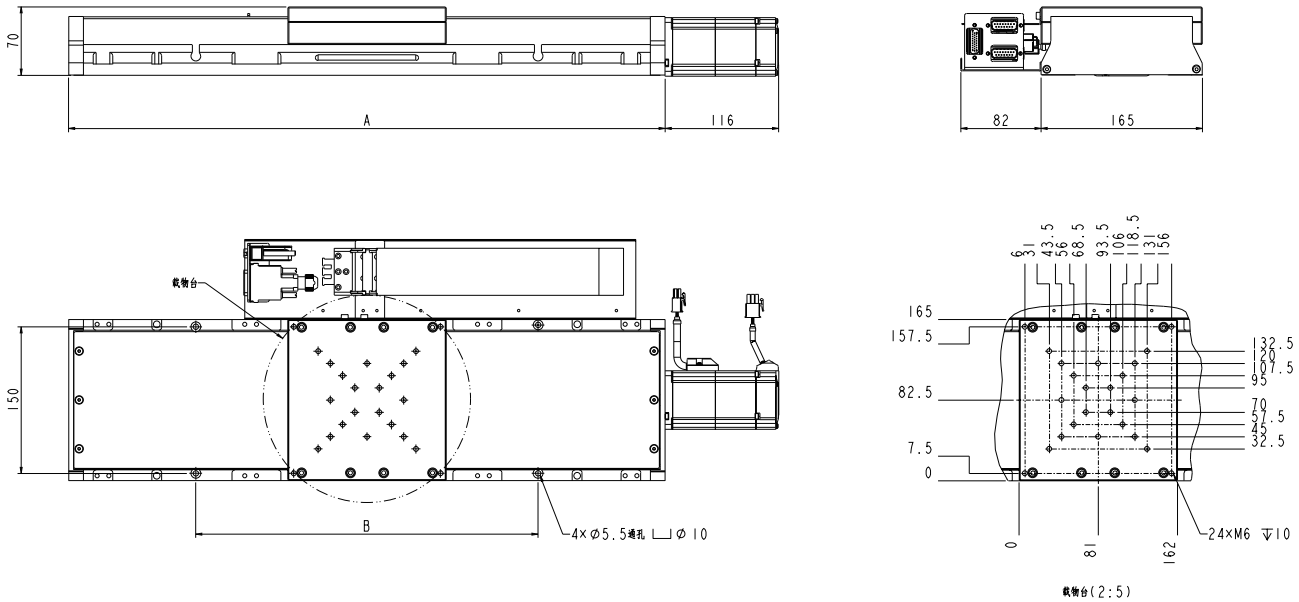


Parameter Table

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	±1 μm	±1 μm	±1.5 μm	±2 μm	±2 μm	±2 μm
	Rotary encoder	±1.5 μm	±1.5 μm	±1.5 μm	±2 μm	±2 μm	±2 μm
Bi directional repetitive positioning accuracy	Grating ruler	±0.3 μm	±0.35 μm	±0.4 μm	±0.45 μm	±0.5 μm	±0.6 μm
	Rotary encoder	±1 μm	±1 μm	±1 μm	±1.5 μm	±1.75 μm	±2 μm
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		± 2μm	±2.5 μm	±3 μm	±3.5 μm	±4 μm	±5 μm
resolution	Grating ruler	1 nm，100 nm，0.1 μm					
	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 μm					
Platform quality		7 kg	7.5 kg	8 kg	9 kg	10 kg	11 kg
Platform material		Aluminium					
mean time between failures		27000 Hours					

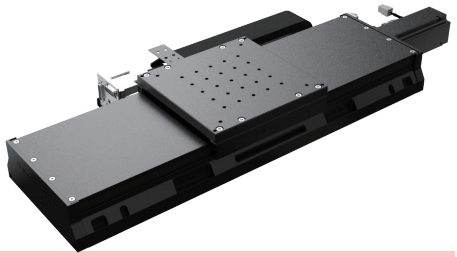
Note: The above test data was obtained from a linear amplifier in a laboratory environment, with the test point located 25mm above the center point

Overall dimension



Single axis precision screw platform

PS190LS series specifications

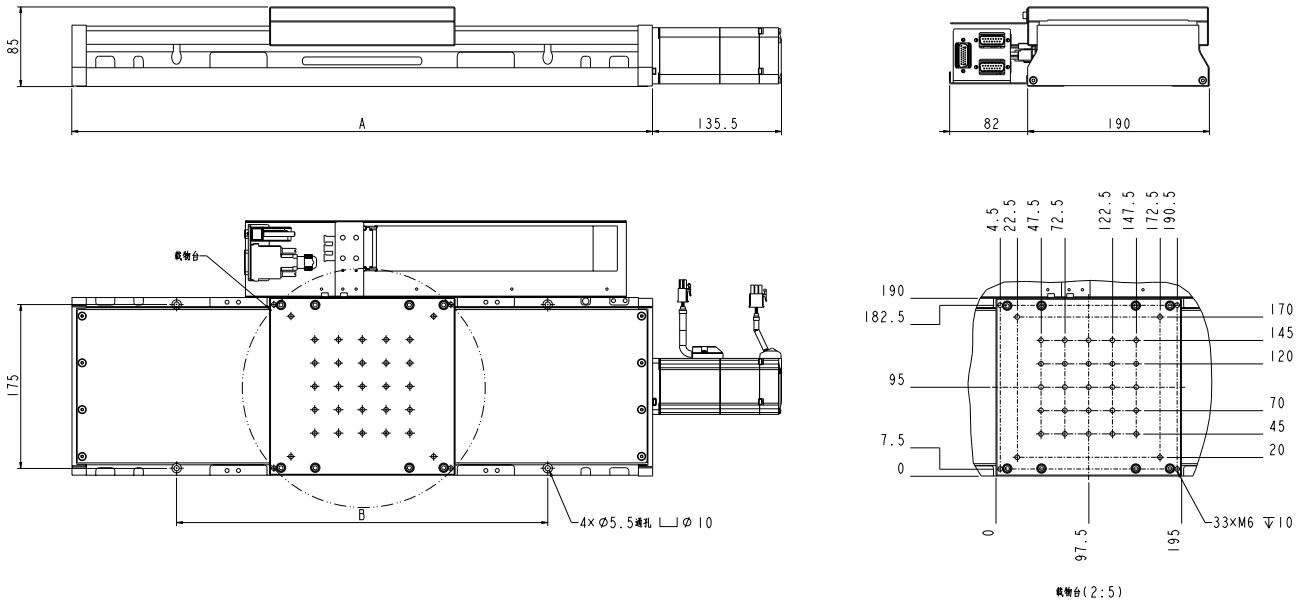


Parameter Table

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
Bi directional repetitive positioning accuracy	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
	positioning accuracy Rotary encoder	±1.2 μm	±1.2 μm	±1.75 μm	±1.75 μm	±1.75 μm	±2 μm	±2 μm	±2.5 μm
	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 um							
	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 um							
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							

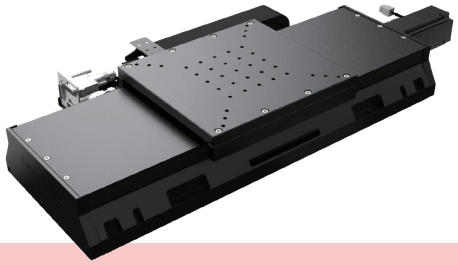
Note: The above test data was obtained from a linear amplifier in a laboratory environment, with the test point located 25mm above the center point

Overall dimension



Single axis precision screw platform

PS225LS series specifications

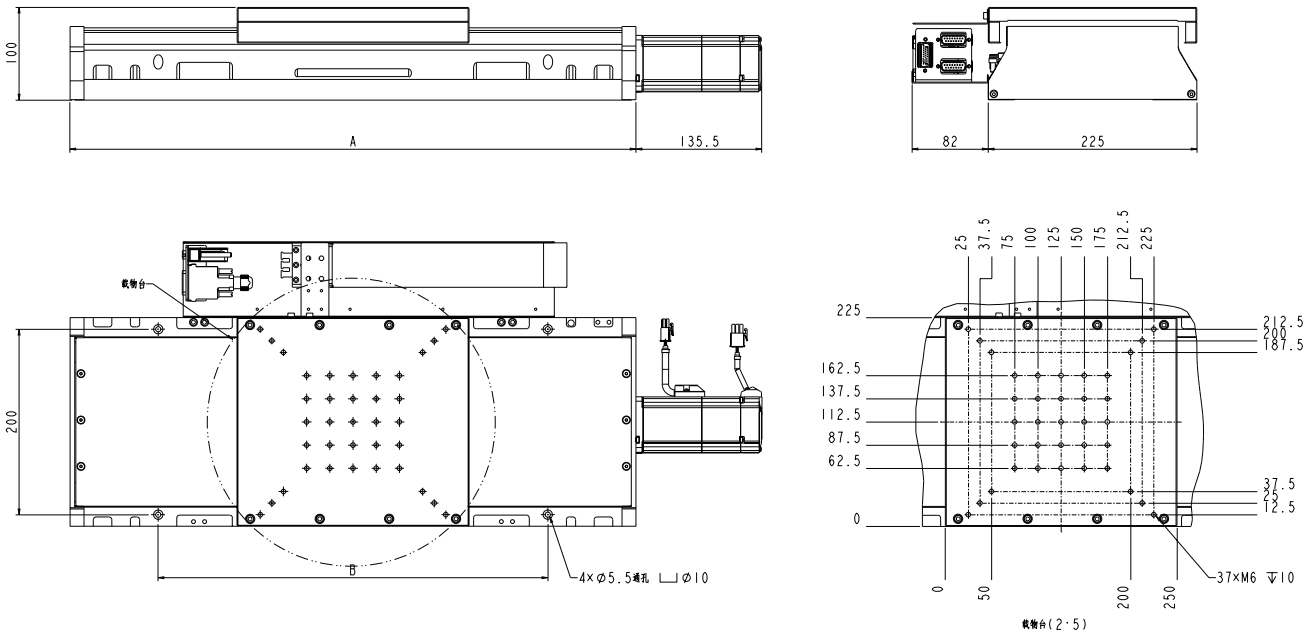


Parameter Table

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	±2.5μm
	Rotary encoder	±1μm	±1μm	±1.5μm	±1.5μm	±1.75μm	±2μm	±2.5μm	±2.5μm
Bi directional repetitive positioning accuracy	Grating ruler	±0.35μm	±0.4μm	±0.5μm	±0.5μm	±0.6μm	±0.6μm	±0.75μm	±0.75μm
	Rotary encoder	±1μm	±1μm	±1μm	±1.5μm	±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							

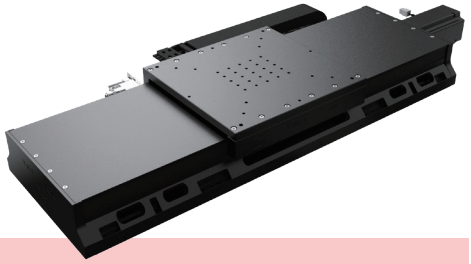
Note: The above test data was obtained from a linear amplifier in a laboratory environment, with the test point located 25mm above the center point

Overall dimension



Single axis precision screw platform

PS280LS series specifications

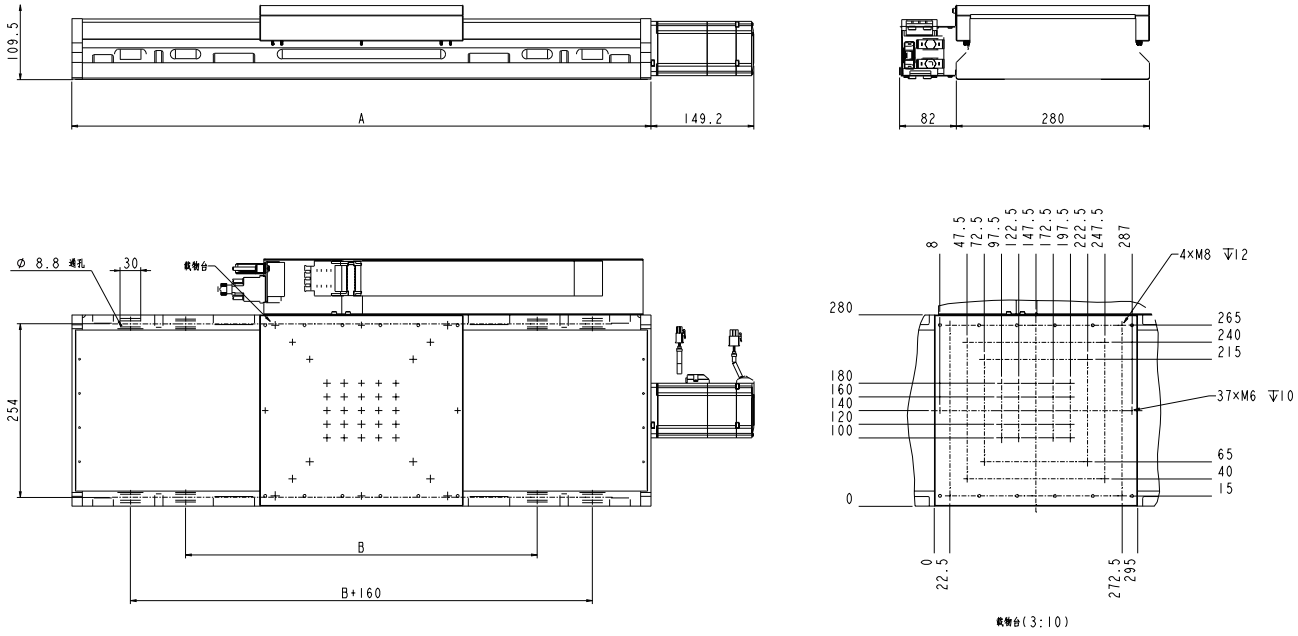


Parameter Table

Platform model		PS280LS-300	PS280LS-400	PS280LS-500	PS280LS-600	PS280LS-700	PS280LS-800
Effective stroke		300 mm	400 mm	500 mm	600 mm	700 mm	800 mm
positioning accuracy	Grating ruler	±2.5 μm	±2.5 μm	±2.5 μm	±2.75 μm	±2.75 μm	±3 μm
	Rotary encoder	±2.5 μm	±3 μm	±3 μm	±3 μm	±3.5 μm	±3.5 μm
Bi directional repetitive positioning accuracy	Grating ruler	±0.6 μm	±0.65 μm	±0.65 μm	±0.7 μm	±0.75 μm	±0.8 μm
	Rotary encoder	±1.5 μm	±1.5 μm	±1.5 μm	±1.5 μm	±1.5 μm	±1.5 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	±5 μm	±6 μm	±7 μm	±8 μm	±10 μm
resolution	Grating ruler	1 nm，100 nm，0.1 μm					
	Rotary encoder	23 bit					
maximum speed		300 mm/s					
Maximum Load	Horizontal placement	120 kg					
	Vertical placement	70 kg					
Minimum step quantity		100 nm，1 μm					
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



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: YT Customer customized loading platform: DT	0.1um resolution digital input: SZ analog input: MN	Drag chain wiring box: L1 No drag chain wiring box: /

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

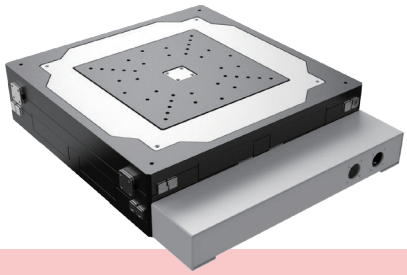
- ·Choose cross roller guide rail
- ·Compact structure
- ·Low side height
- ·Abbe error is small

Customization

Larger itinerary can be customized

Planar XY Cross Roller Platform

PlaneD-XY series specifications

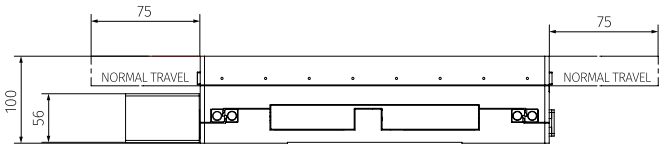


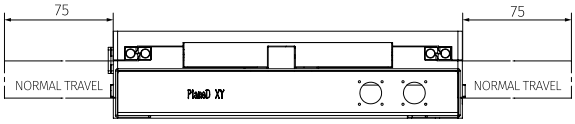
Parameter Table

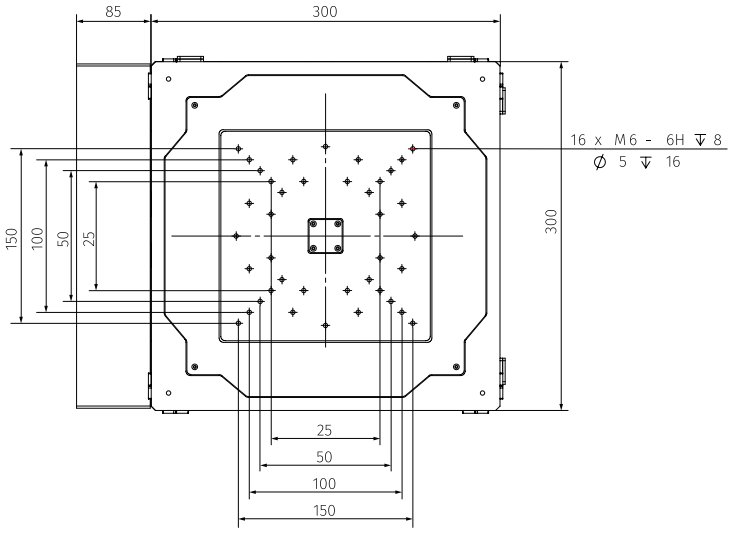
Platform model	PLM-PlaneD-XY150×150	PLM-PlaneD-XY200×200	PLM-PlaneD-XY250×250	PLM-PlaneD-XY300×300
Effective stroke	100 mm×100 mm	150 mm×150 mm	200 mm×200 mm	250 mm×250 mm
positioning accuracy	±0.3 μm	±0.4 μm	±0.5 μm	±0.6 μm
Bi directional repetitive positioning accuracy	±0.1 μm	±0.15 μm	±0.2 μm	±0.25 μm
pitch	15 arc sec	16 are sec	18 are sec	20 are sec
yaw	15 arc sec	16 are sec	18 are sec	20 are 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			

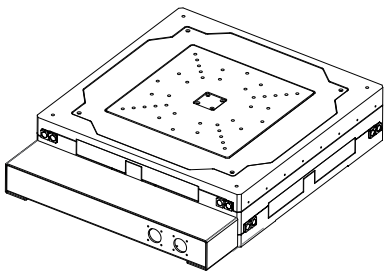
Note: The above test data was obtained from a linear amplifier in a laboratory environment, with the test point located 25mm above the center point

PLM-PlaneD-XY150×150 External dimensions

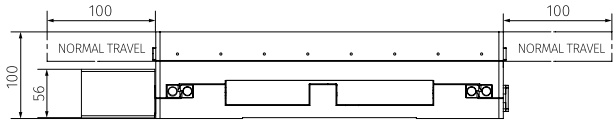


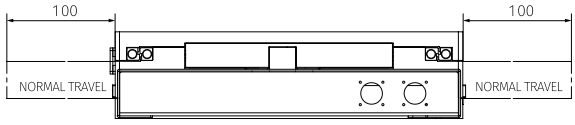


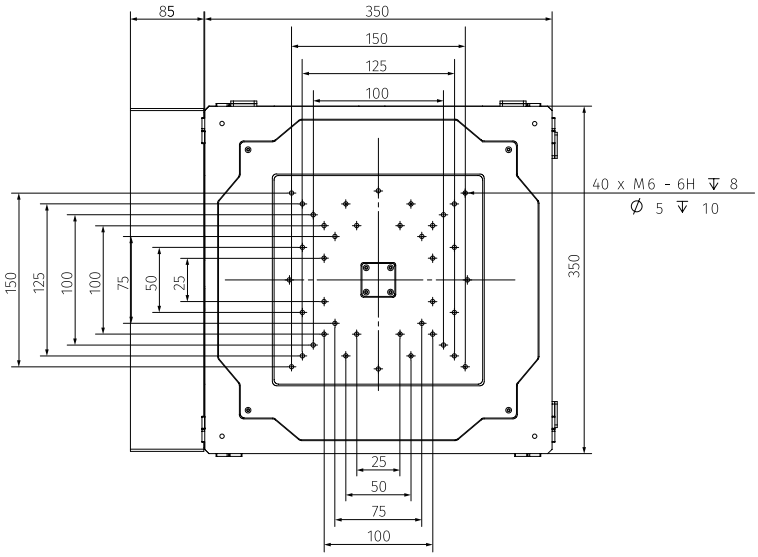


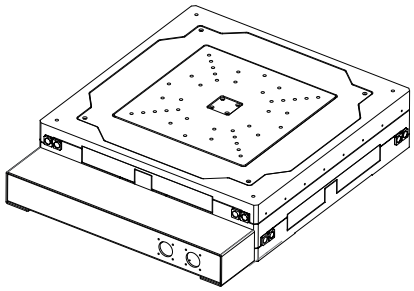


PLM-PlaneD-XY200×200 External dimensions

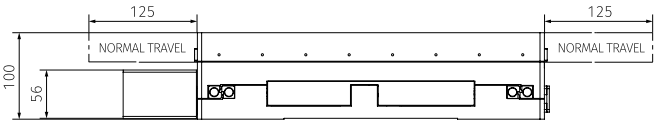


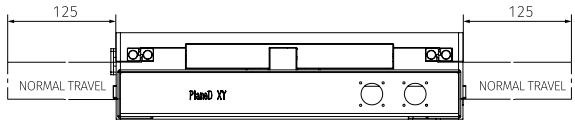


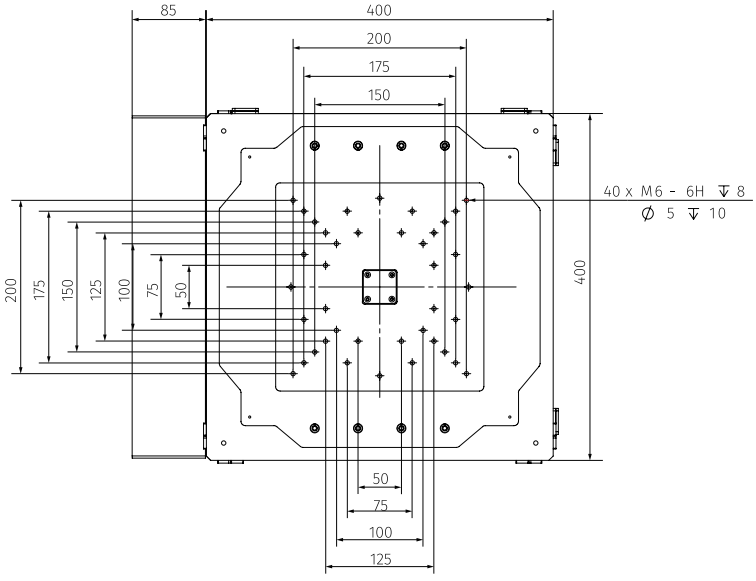


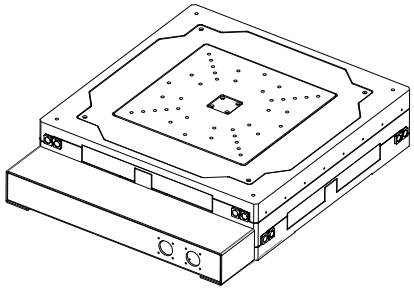


PLM-PlaneD-XY250×250 External dimensions

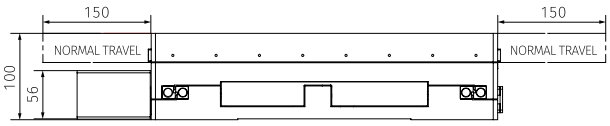


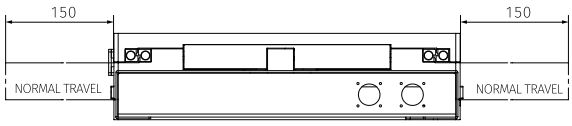


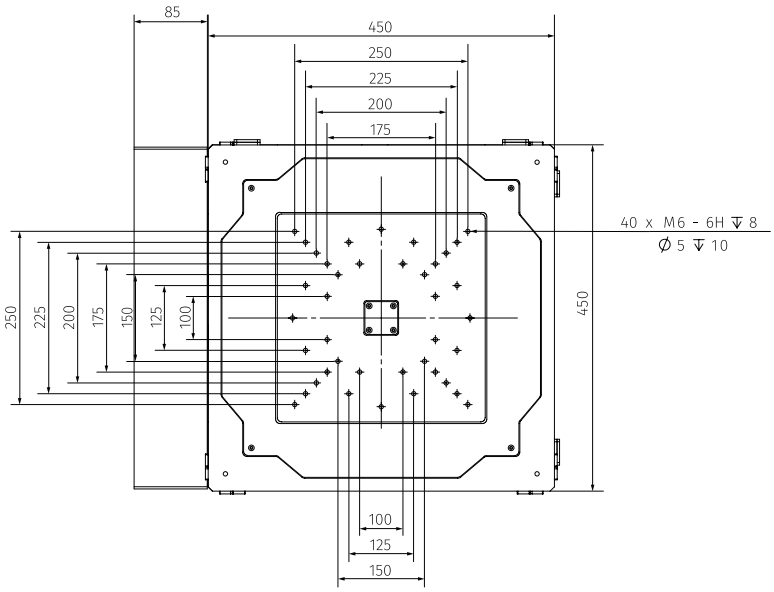


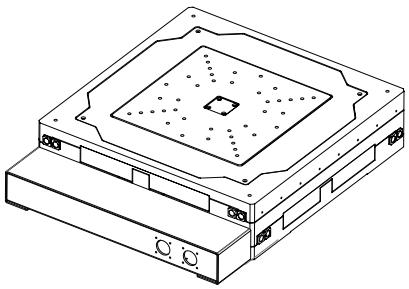


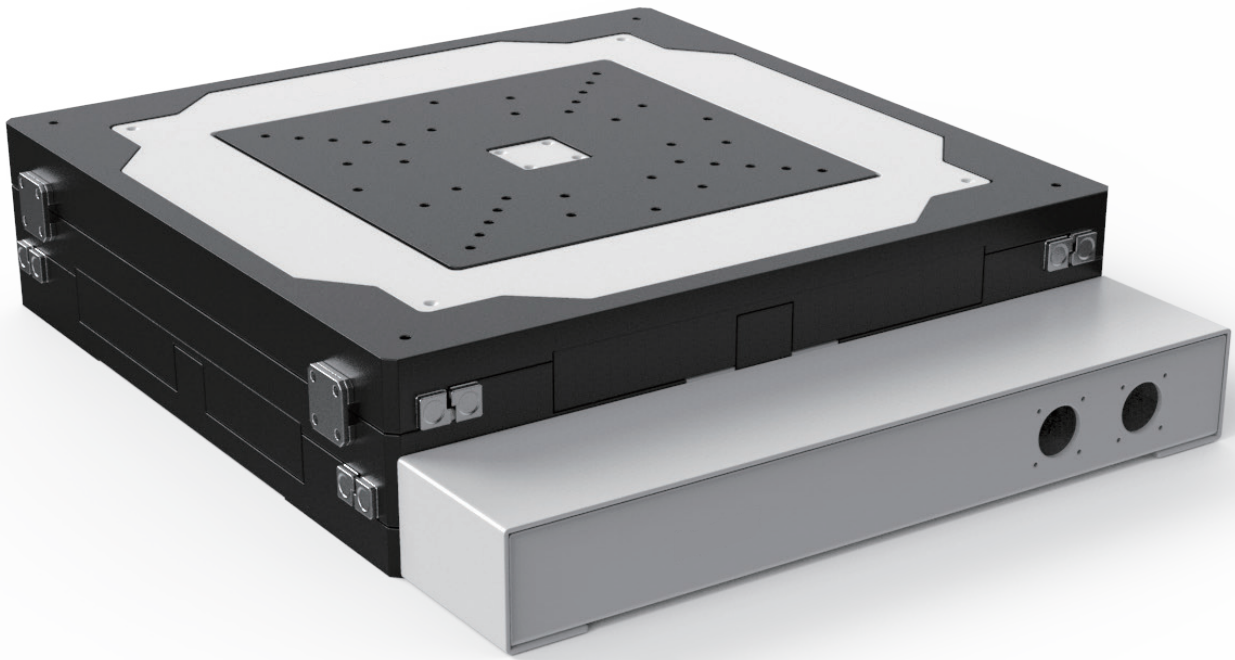
PLM-PlaneD-XY300×300 External dimensions











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	YT	0.1um resolution digital input	SZ
	150 250	Customer customized loading platform	DT	analog input	MN
	350				

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

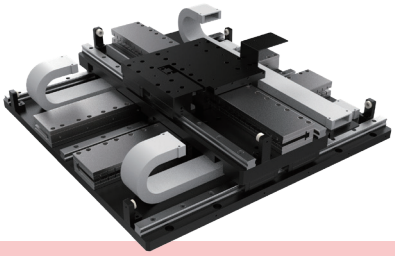
- ·Low side height
- ·Abbe error is small
- ·Compact platform structure with strong driving capability
- ·The lower shaft is driven by dual motors
- ·The maximum no-load speed of both the upper and lower axes can reach 2000mm/s
- ·The no-load acceleration can reach 2g with an electronic resolution of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

Customization

Larger itinerary can be customized

Flat track XY platform

Plane-XY series specifications

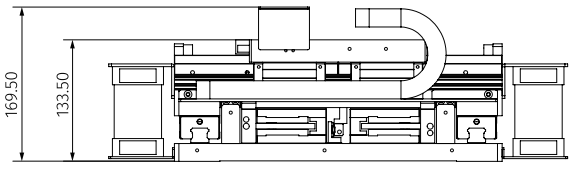


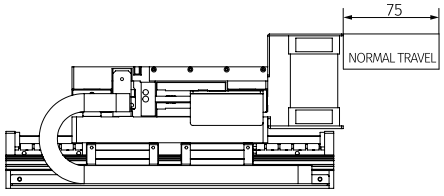
Parameter Table

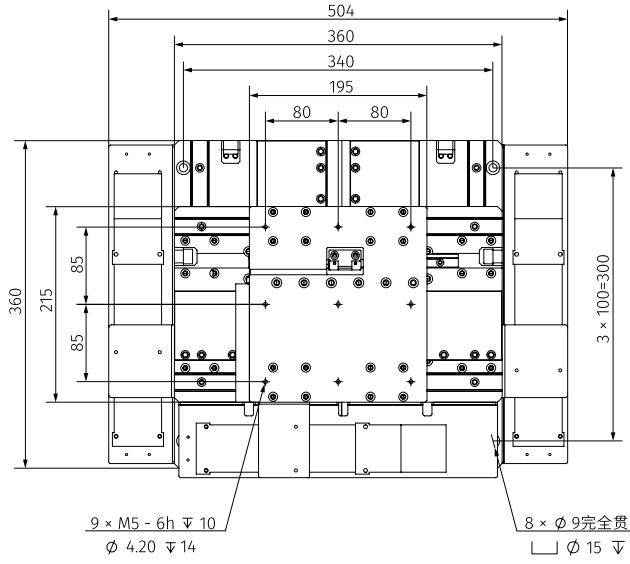
Platform model	PLM-Plane-XY-150	PLM-Plane-XY-250	PLM-Plane-XY-350
Effective stroke	150 mm×150 mm	250 mm×250 mm	350 mm×350 mm
positioning accuracy	±0.3 μm	±0.3 μm	±0.3 μm
Bi directional repetitive positioning accuracy	±0.15 μm	±0.15 μm	±0.15 μm
pitch	7 arc sec	9 are sec	11 are sec
yaw	7 arc sec	9 are sec	11 are sec
Straightness	±1.5 μm	±2 μm	±2.5 μm
resolution		1 nm	
Maximum acceleration		2 g	
maximum speed		2000 mm/s	
Maximum horizontal load	45 KG	45 KG	45 KG
Continuous thrust		Upper axis: 153 N Lower axis: 306 N	
Peak thrust		Upper axis: 864 N Lower axis: 1728 N	
Minimum step quantity		20 nm	
Platform quality	30 KG	40 KG	50 KG
Platform material		Aluminium	
mean time between failures		27000 Hours	

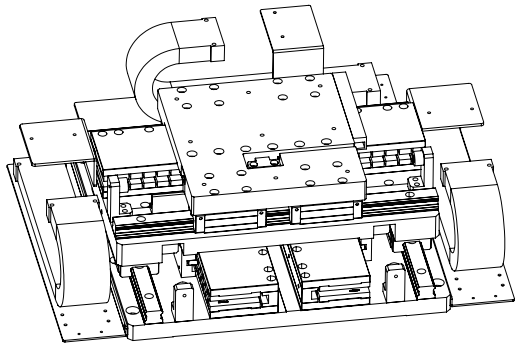
Note: The above test data was obtained from a linear amplifier in a laboratory environment, with the test point located 25mm above the center point

PLM-Plane-XY150×150 External dimensions

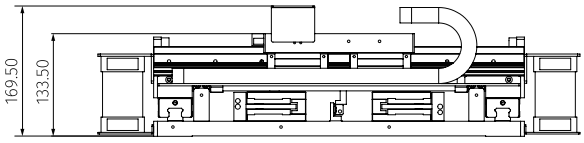


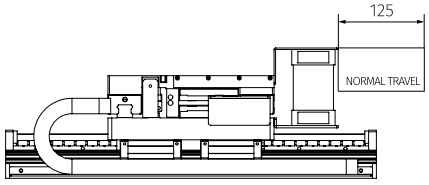


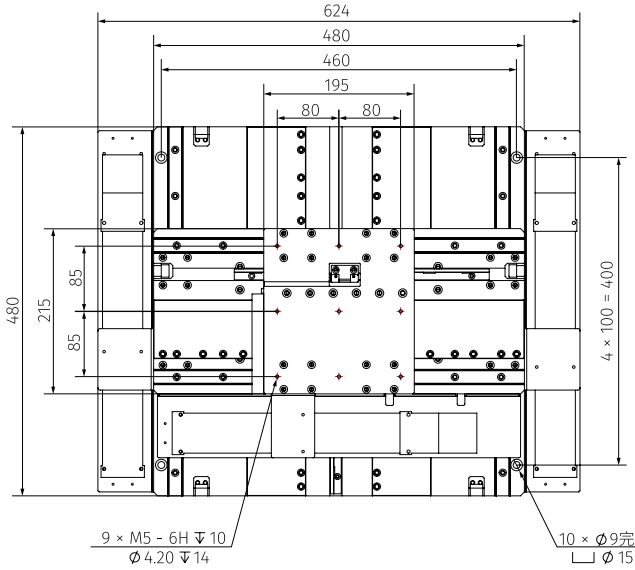


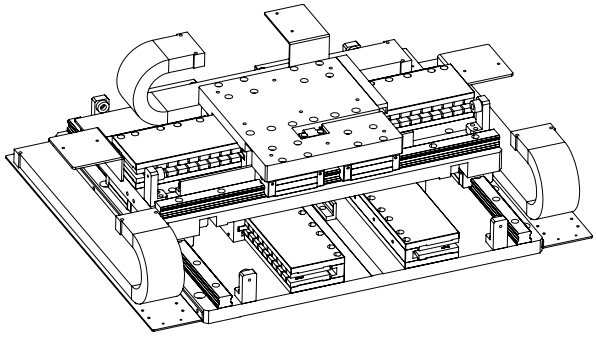


PLM-Plane-XY250×250 External dimensions

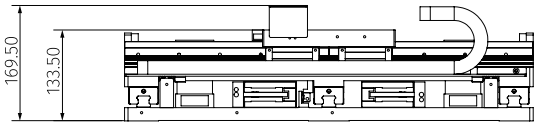


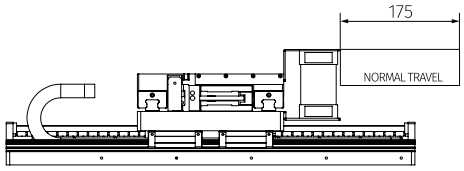


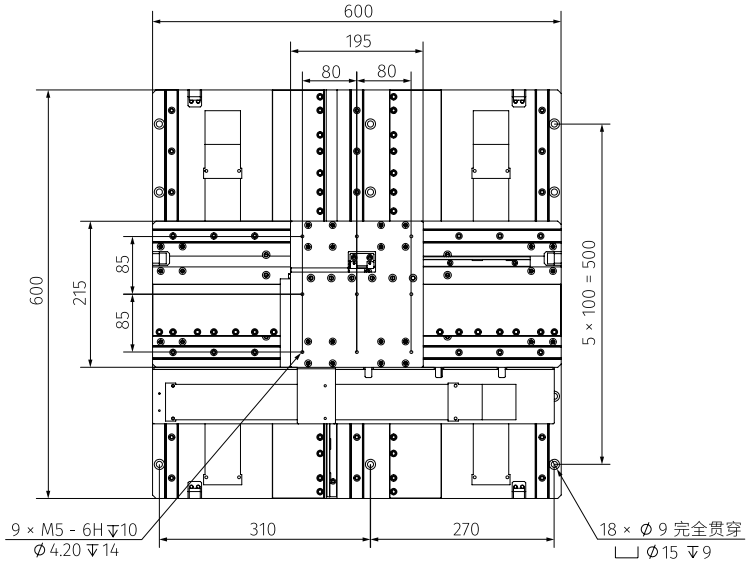


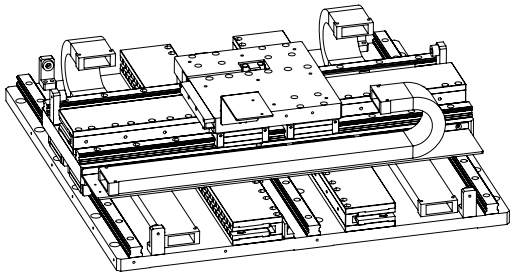


PLM-Plane-XY350×350 External dimensions









Plane Z axis lifting stage

Parameter Table

PLM - Plane - XY - 150 - YT - SZ

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

Application scenarios

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

Product Introduction

Product Features

- ·Vertical motion Z-axis platform with nanometer level positioning accuracy
- ·Linear motor drive
- ·Adopting cross roller guide rail
- ·Has excellent dynamic performance and positioning accuracy
- ·Resolution of 1nm
- ·Repetitive positioning accuracy ± 100nm
- ·Positioning accuracy ± 200nm

Structural characteristics

- ·High precision direct drive lifting platform
- ·High dynamic performance (no-load cut-off frequency greater than 120Hz)
- ·Low lateral height, suitable for compact space applications
- ·Built in pneumatic balance, maximum load 15kg
- ·Can form a multi axis system with Surface Meta or linear axis
- ·In situ stability of 5nm (equipped with linear driver and isolated laboratory environment)

Customization

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 μ m
Platform material	Aluminium
mean time between failures	20000 Hours

Remarks:

(1) Measure parallel or perpendicular to the direction of the wedge block;

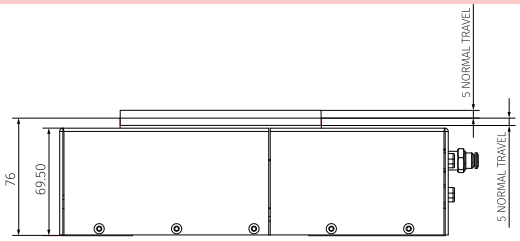
(2) Adaptation - AS feedback, configure linear amplifier;

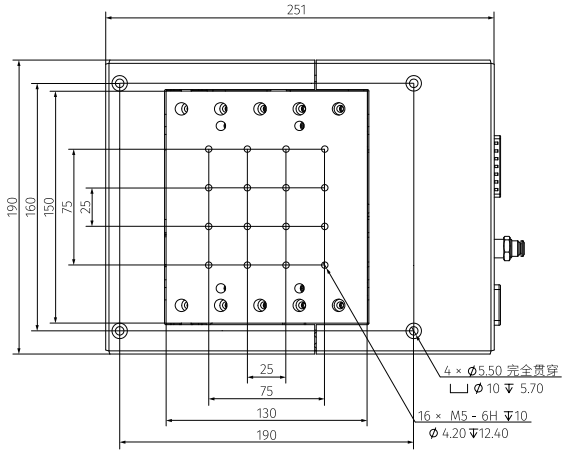
(3) No load test;

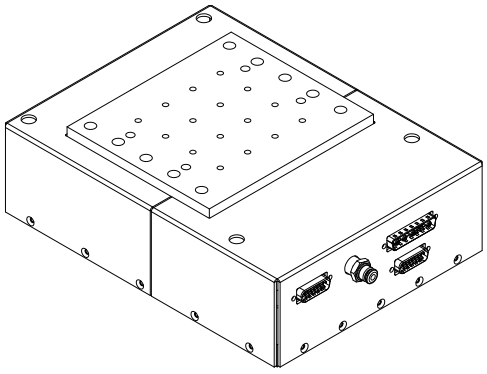
(4) Other itineraries can be customized.

(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 — AS
	40 100	High precision VPP1 volt sine analog input — ASH
	160	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

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;

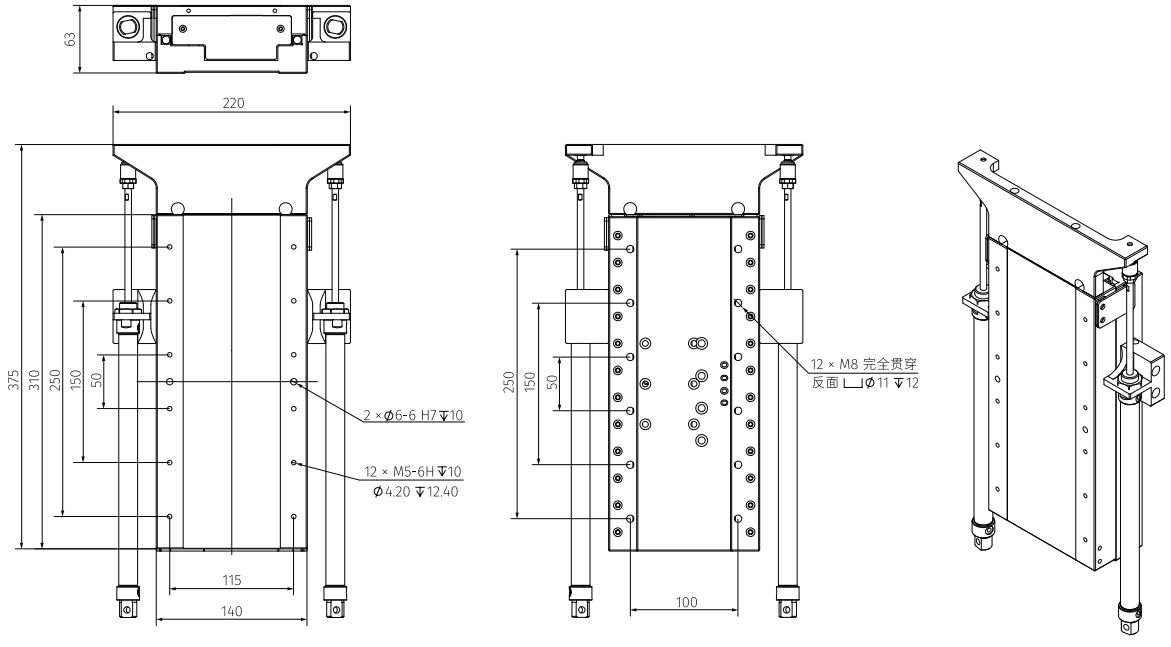
(2) No load, corresponding power amplifiers need to be configured;

(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

Platform options		Feedback options	
Original factory standard installation hole position	YT	0.1um resolution digital input	SZ
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

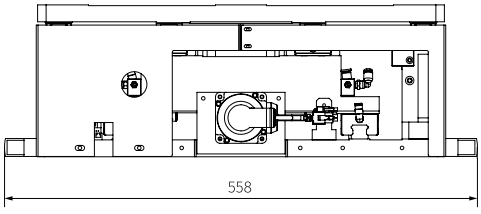
ZMS series specifications

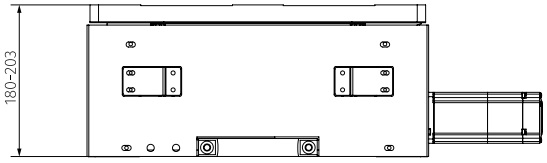
Parameter Table

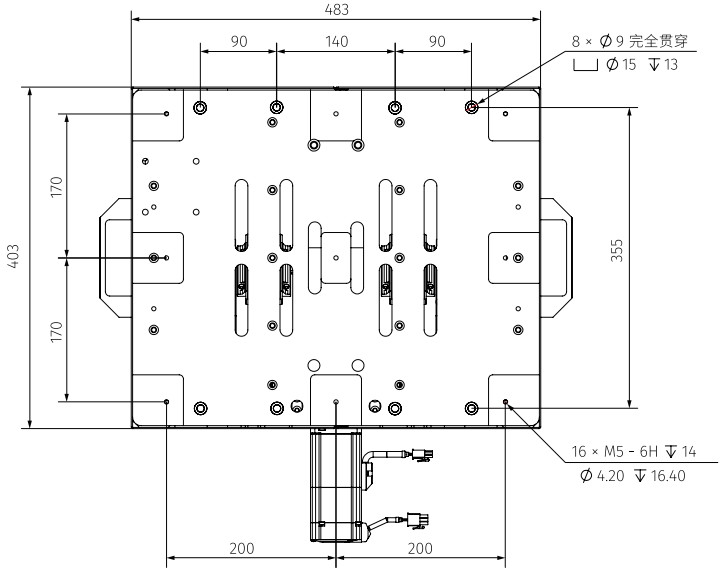
Platform model	PLM-ZMS-23
Effective stroke	23mm
positioning accuracy	±2μm
Bi directional repetitive positioning accuracy	±1μm
Straightness	±2μm
resolution	0.1μm
Maximum acceleration	2g
maximum speed	30mm/s
Maximum horizontal load	60KG
Platform quality	50KG
Platform material	Aluminium
mean time between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

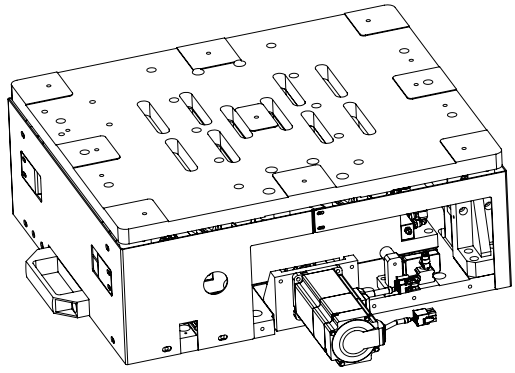
Note: The above test data was obtained from a linear amplifier in a laboratory environment, with the test point located 25mm above the center point

External dimensions









ZTT plane fine adjustment stage

Model Naming Rules

PLM - ZTT	-	4
Platform model		Journey: 4MM

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

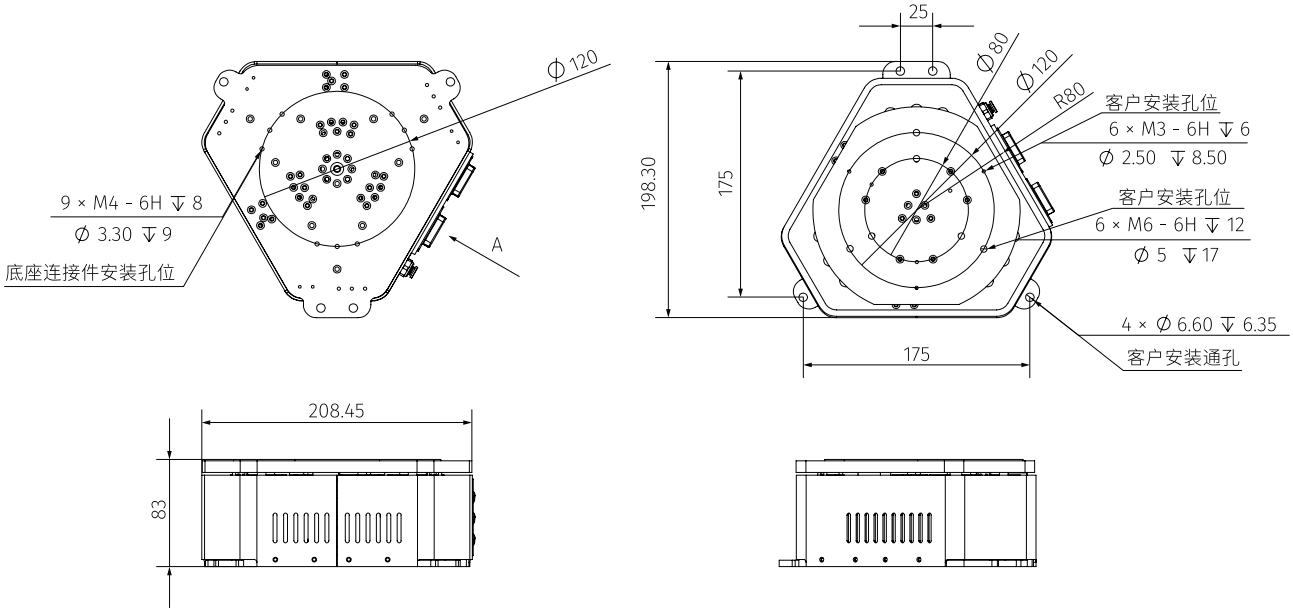
ZTT series specifications

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

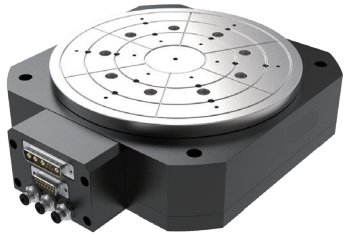
- Low height flat design
- Sub arcsecond level positioning accuracy
- Axial and radial runout less than 250nm
- No slots, brushless servo direct drive motor drive
- Minimize axial, radial, and tilt error motion to the greatest extent possible
- Excellent positioning performance, speed stability, and 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;

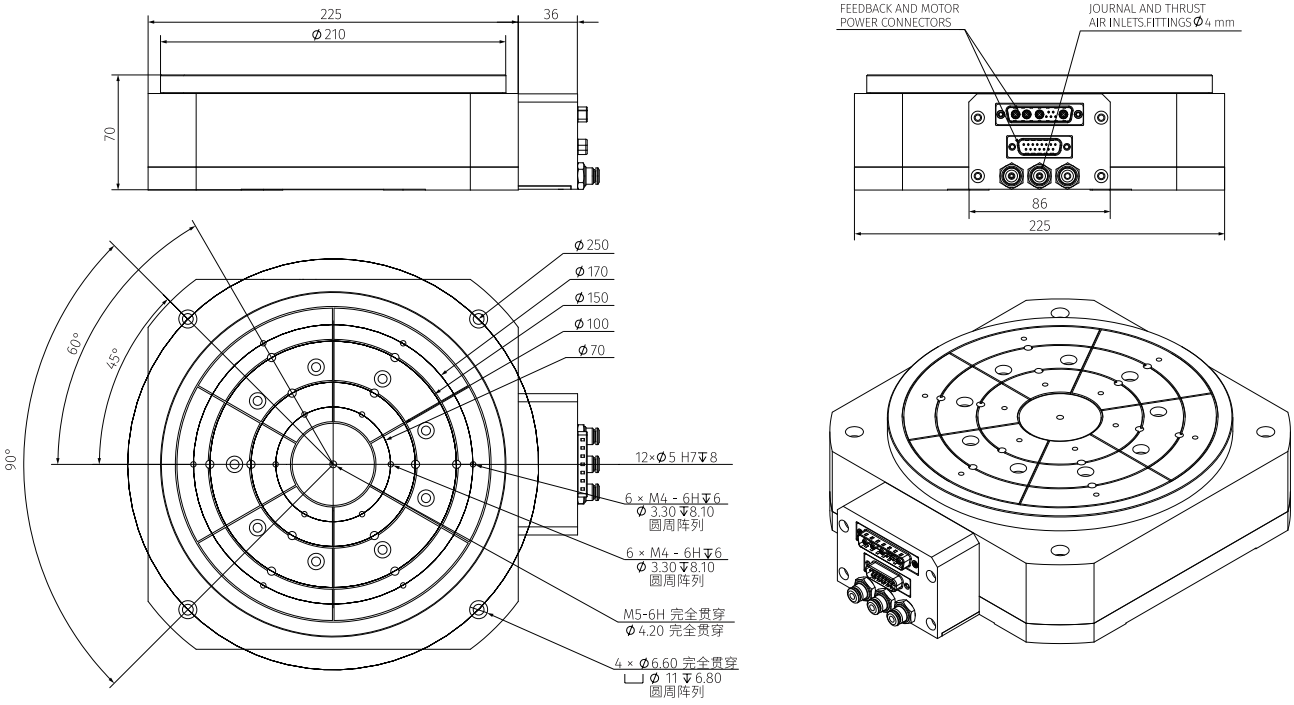
(2) No load, corresponding power amplifiers need to be configured;

(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	YT	Resolution digital input	SZ
400	600	Customer customized loading platform	DT	analog input	MN
800					

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

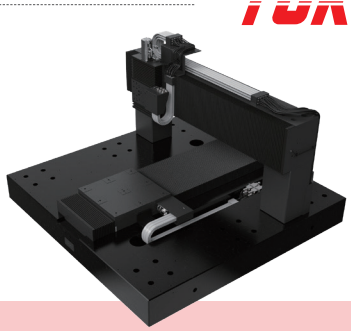
- Adopting ironless linear motor control
- High load, high precision, large stroke, high rigidity
- The precision platform is dust-proof
- Centralized oil injection, metal grounding function

Customization

Larger itinerary can be customized

Fixed beam gantry platform

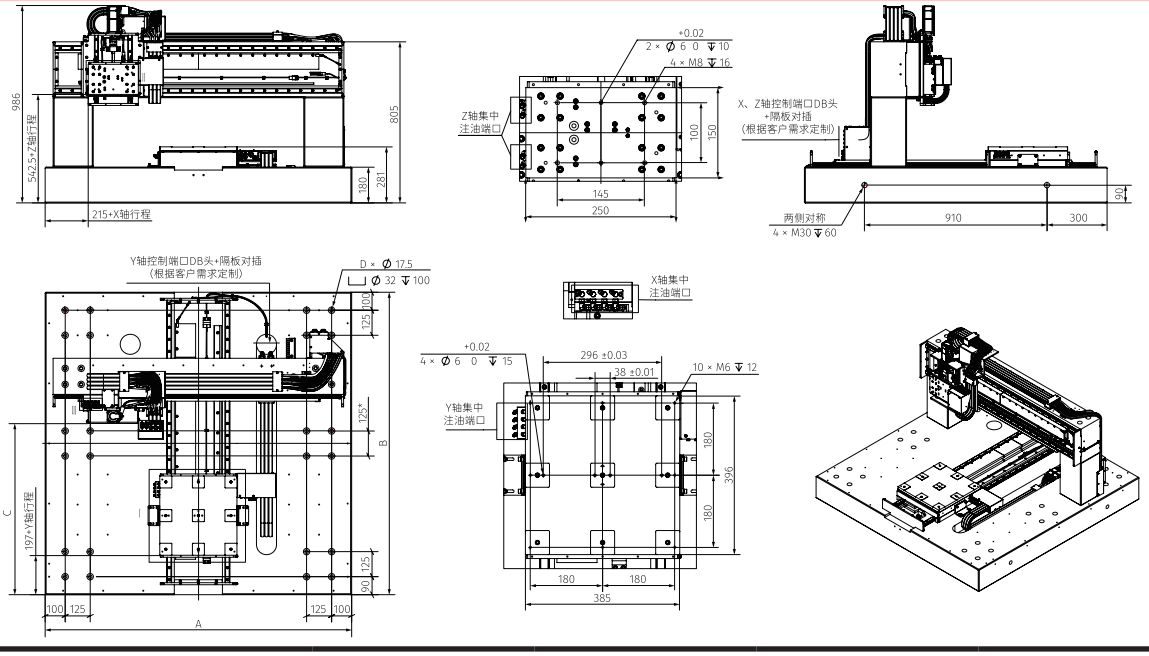
PDM-DLXY series specifications



Parameter Table

Platform model		PDM-DLXY-400-400-100	PDM-DLXY-600-600-100	PDM-DLXY-800-800-100
Effective stroke		400*400*100	600*600*100	800*800*100
positioning accuracy		±2 μm	±2 μm	±2 μm
Bi directional repetitive positioning accuracy		±1 μm	±1 μm	±1 μm
pitch		15 arc sec	20 arc sec	25 arc sec
yaw		15 arc sec	20 arc sec	25 arc sec
roll		15 arc sec	20 arc sec	25 arc sec
Straightness		±3 μm	±5 μm	±8 μm
resolution			100 nm	
Maximum acceleration			1 g	
maximum speed			1 m/s	
Y-axis load			60 KG	
Z-axis load			12 KG	
Continuous thrust	X-axis		221 N	
	Y-axis		393 N	
Peak thrust of P	X-axis		1248 N	
	Y-axis		2830 N	
Minimum step quantity			500 nm	
Platform quality		1400 kg	1500 kg	1700 kg
Platform material			Marble	
mean time between failures			20000 Hours	

External dimensions



Platform model	A	B	C	D
PDM-DLXY-400-400-100	1280 mm	1100 mm	605 mm	16 mm
PDM-DLXY-600-600-100	1280 mm	1360 mm	705 mm	16 mm
PDM-DLXY-800-800-100	1480 mm	1560 mm	905 mm	24 mm

XY cross stage

Model Naming Rules

PDM - DJXY - 500 - 500 - YT - SZ

Platform model	Trip:23MM	Platform options	Feedback options
	Company: mm 500 800	Original factory standard installation hole position YT Customer customized loading platform DT	Resolution digital input SZ analog input MN

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

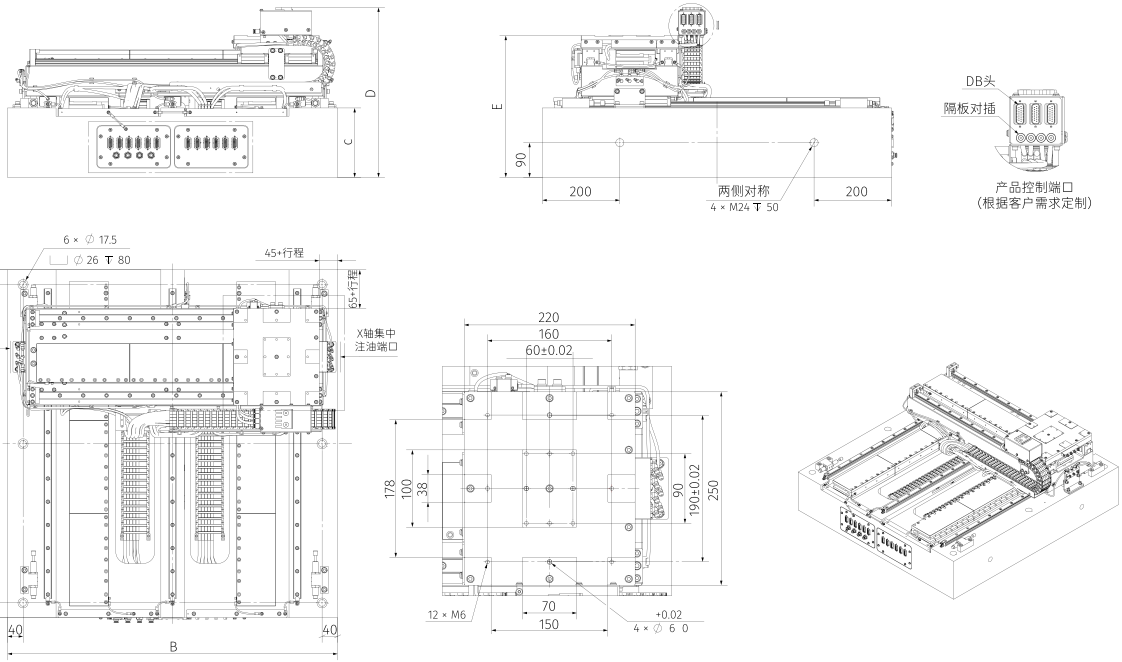
PDM-DJXY series specifications

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	1150mm	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 YT	Resolution digital input SZ
	500 800	Customer customized loading platform DT	analog input 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

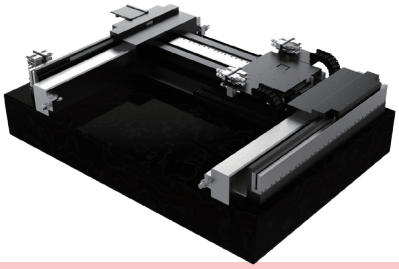
- ·The dual drive crossbeam adopts an H-bridge structure with air guide rails
- ·XY integrated type
- ·Low Abbe arm

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

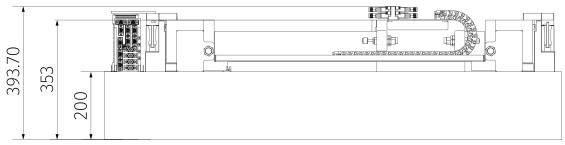


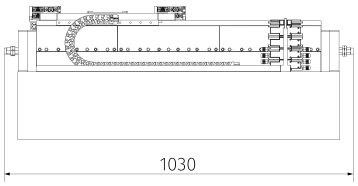
Parameter Table

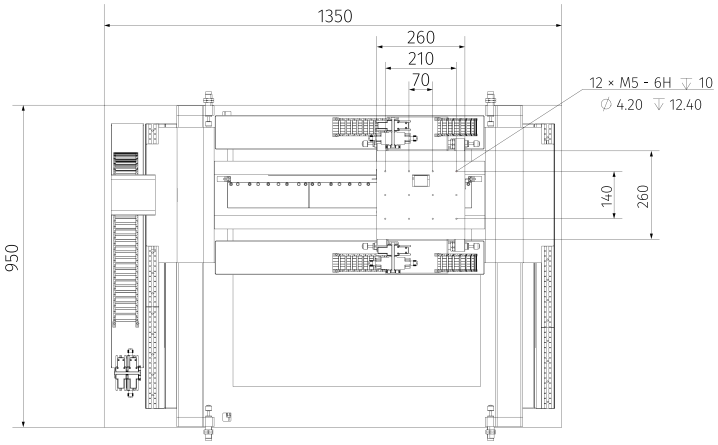
Platform model	PLM-PlaneH-XY-400
Effective stroke	400 mm×400 mm
positioning accuracy	±0.3 μm
Bi directional repetitive positioning accuracy	±0.2 μm
pitch	2.5 arc sec
yaw	2.5 arc sec
Straightness	±1.5 μm
Flatness	±1.5 μm
resolution	1 nm
Maximum acceleration	0.5 g
maximum speed	500 mm/s
Maximum horizontal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

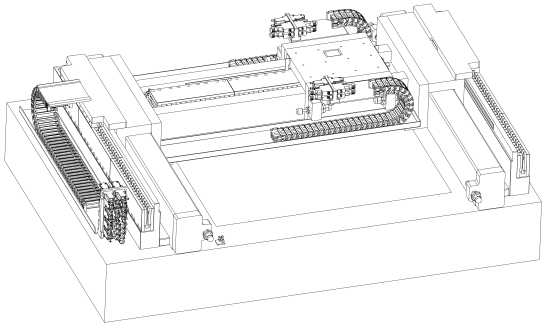
Note: The above test data was obtained from a linear amplifier in a laboratory environment, with the test point located 25mm above the center point

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

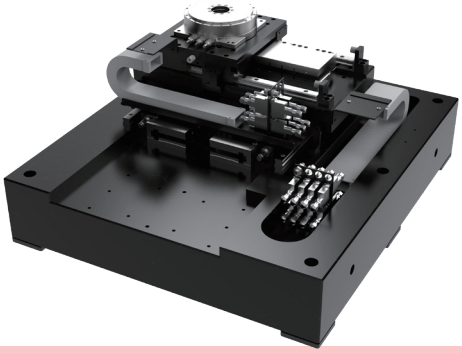
·Positioning accuracy less than ± 2um

Customization

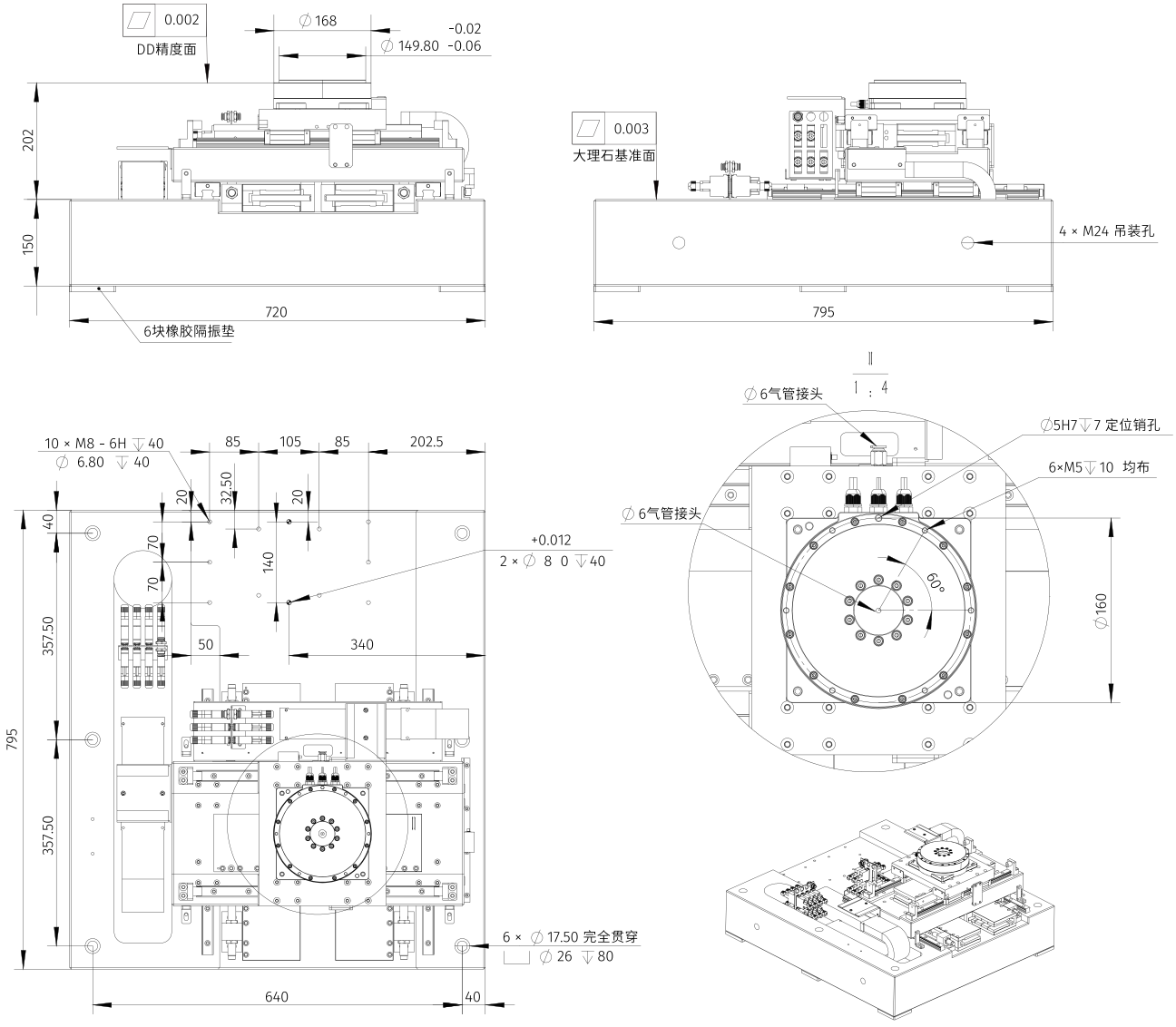
It can be evaluated and customized according to customer needs such as configuration, itinerary, load, special structure, etc

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

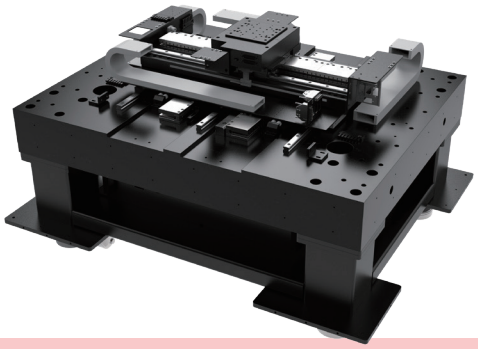
·Adopting XYZ stacking structure, ironless linear motor direct drive control, no cogging effect, smooth operation at low speeds (with small speed fluctuations)

·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

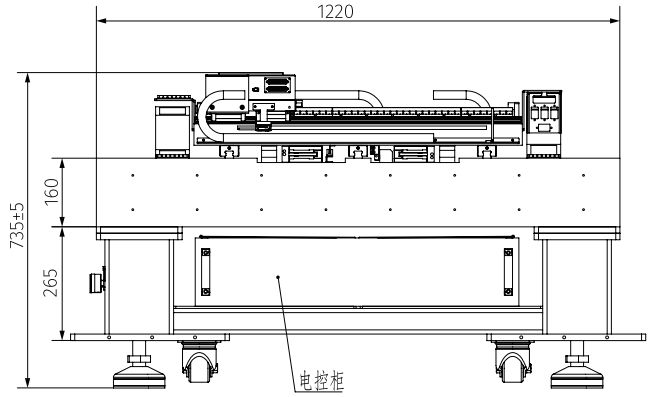
·XY axis stacked structure, using marble base, high stability, Z-axis direct drive horizontal lifting structure, directly moving load lifting, built-in balance cylinder, stroke 10mm

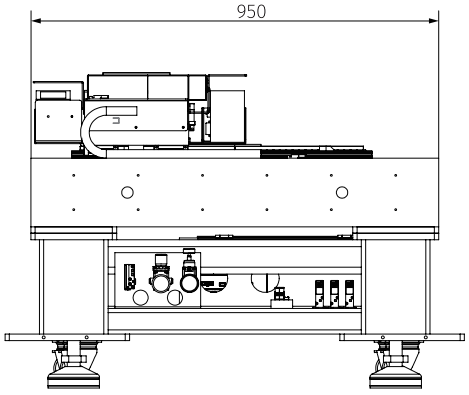
XYZ AOI Testing Platform

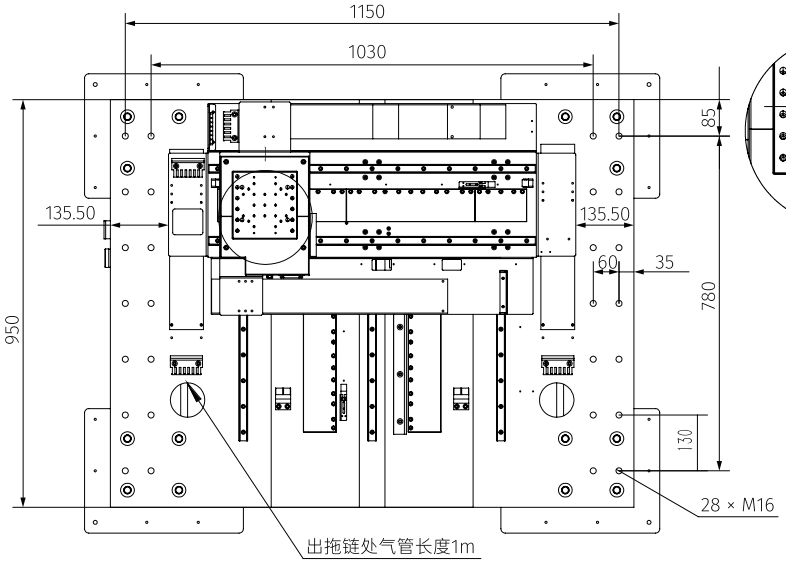
PDM-X500-Y400-Z10-ZKHY specification

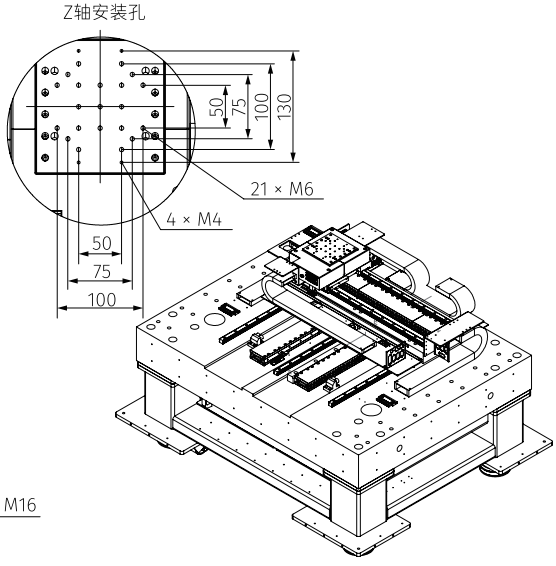


External dimensions









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 Minimμm	12 mm Minimμm
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 fμll range	-	-
Horizontal straightness	+/- 2 μm over 200mm+/- 15 μm over fμll 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

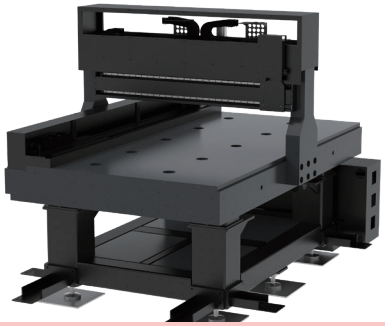
·Compact platform structure with strong driving capability

Customization

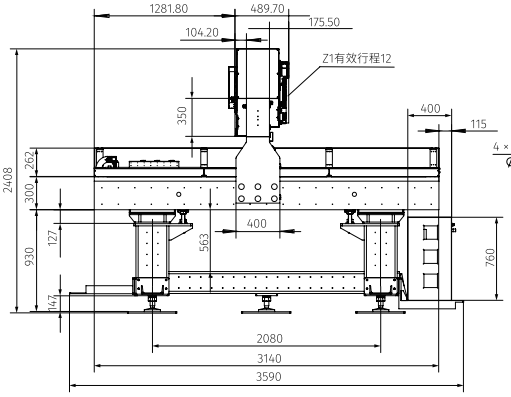
It can be evaluated and customized according to customer needs such as configuration, itinerary, load, special structure, etc

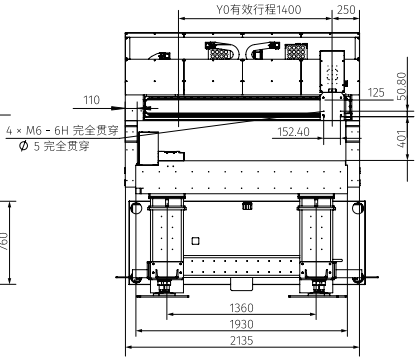
LED wick detection platform

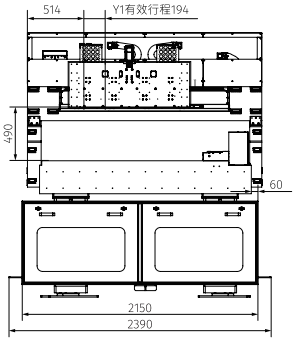
PDM-G5 specification

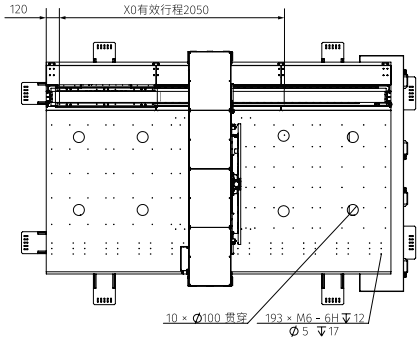


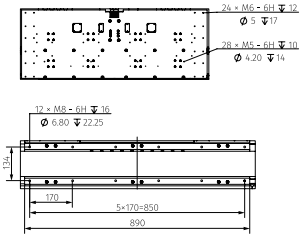
External dimensions

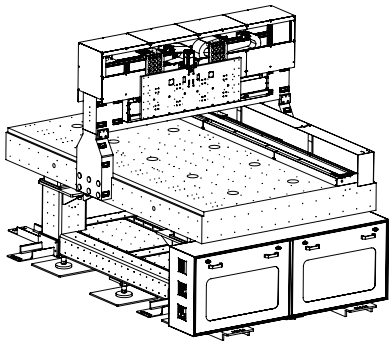












PCB board LDI exposure stage

Parameter Table

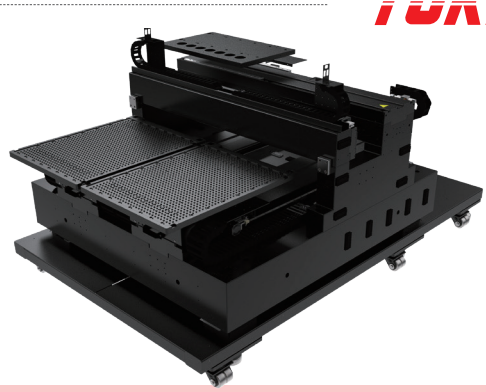
Platform model	PSW-K1195-X900-2Y1350-Z20			
shafting	x-axis	Y1/Y2-axis	Z1/Z2-axis	K-axis
trip	900 mm	1350 mm	20 mm	1195 mm
load	120 kg	≥ 55KG+Z-axis weight	≥55KG	3(Side Hanging)
Encoder resolution	0.1 μm	0.1 μm	20 μm	0.1 μm
Minimum step	0.5 μm	0.5 μm		0.5 μm
Linear positioning accuracy	±2.5 μm	±2.5 μm	±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^2			
Setting time for ± 0.5um position threshold	<0.1/50mm <0.1/700mm at 500mm/s 0.5G acceleration, 50000 acceleration, under hanging load conditions	<0.1S/1mm <0.1S/500mm	-	<0.1/50mm <0.1/700mm Under the conditions of 500mm/s, 0.5G acceleration, 50000 acceleration, and hanging load
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

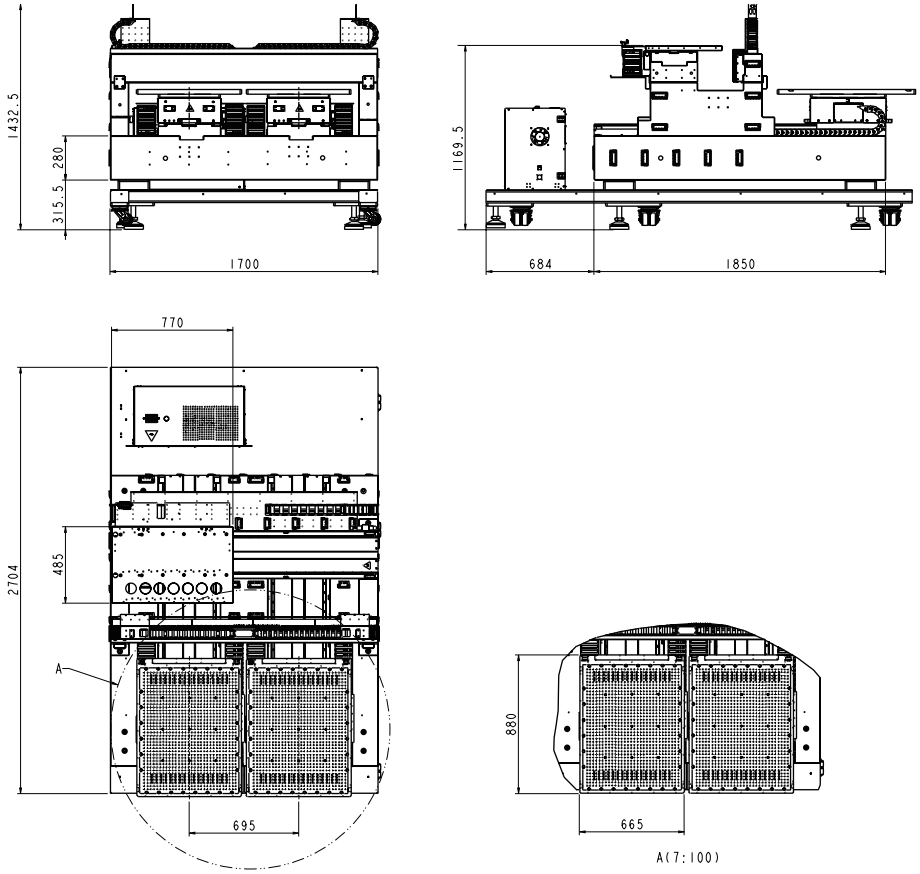
Mainly used in semiconductor production lines, microelectronics production, LCD displays High precision and efficiency are required in industrial projects such as LCD displays, circuit board production, and PCB products

PCB board LDI exposure platform

PSW-K1195-X900-2Y1350-Z20specifications



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 ± 1.5um
·Positioning accuracy less than ± 2.5 um
·Positioning accuracy less than ± 2.5 um

IC carrier board LDI exposure air-floating stage

Parameter Table

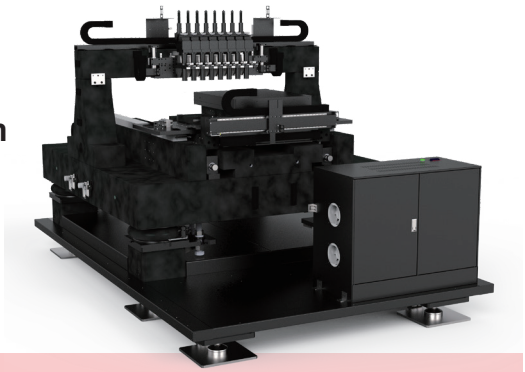
Platform model	PDM-2K600-Z10-X160-Y1350-LDI						
axial	x-axis	Y-axis	Z -axisXY On the platform	Mounted on the Z-axis crossbeam	Z-axis on the K-axis	K1/K2 axis	Small X-axis
trip	160mm	1350 mm	10 mm	10 mm	20 mm	800 mm	700 mm
form	-	-	-	Dual motor dual grating	-	-	-
load	≥ Z-axis+10kg	≥10 Kg	≥10 KG	≥30 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/s²	2000 mm/s2	-	-	-	8 μm	8μm
+Setting time for 0.5um position threshold (s)	<0.1S/1 mm <0.1S/150 mm	<0.1S/1 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^2	4000 mm/s^2
Verticality (orthogonality) of K1, K2 axes and Y-axis	-	-	-	-	-	3 arc sec	-
Setting time for ± 0.5um position threshold	-	-	-	-	-	<0.1/50mm <0.1/700mm at 500mm/s, 0.5G acceleration, 50000+acceleration, under hanging load conditions	
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-LDIspecifications



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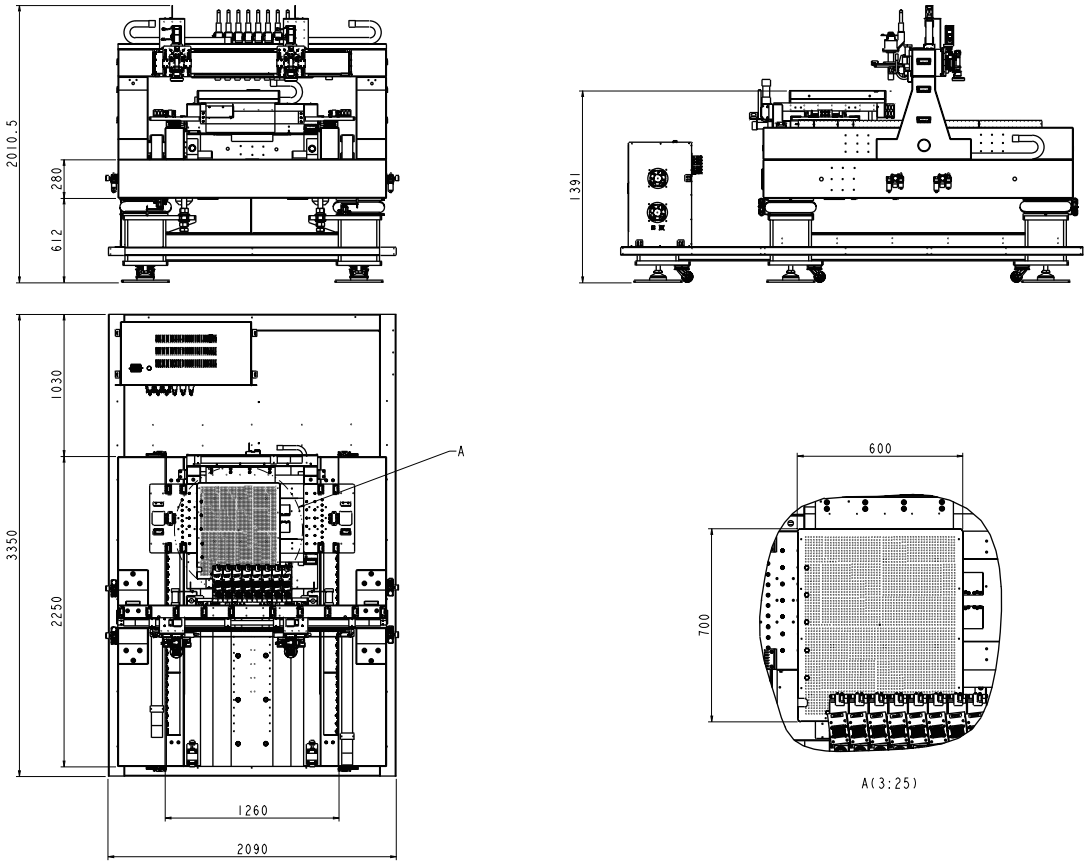


Product Introduction

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)	≤±1μm
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/ ℃	8.0 W/ ℃

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

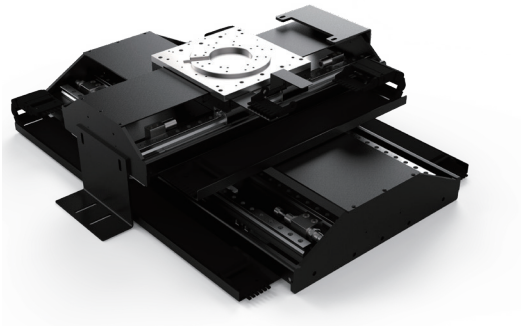
- XY integrated design direct drive platform
- Horizontal straightness less than ± 1um
- Equipped with auxiliary functions such as centralized oil injection and metal grounding

Customization

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

Wafer cutting platform

PDM-X400-Y600specifications



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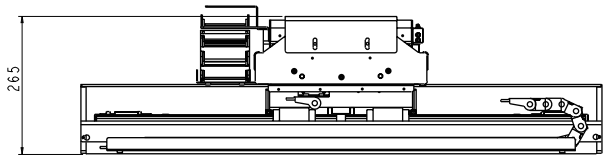
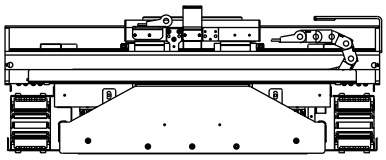
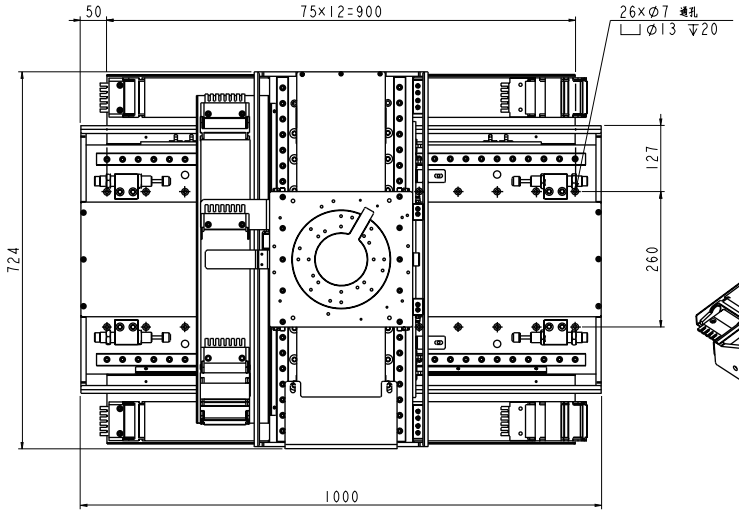
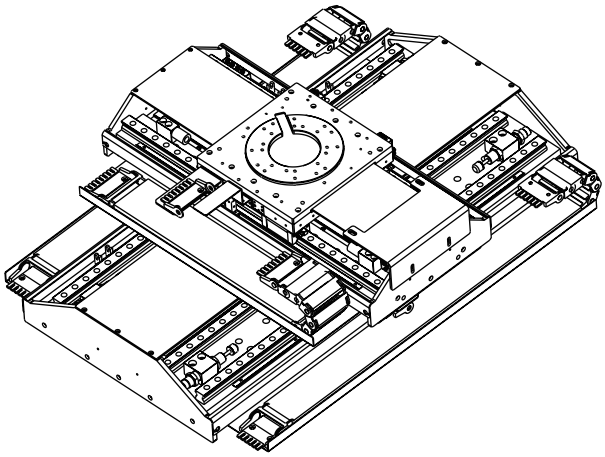








Laser film removal stage

Parameter Table

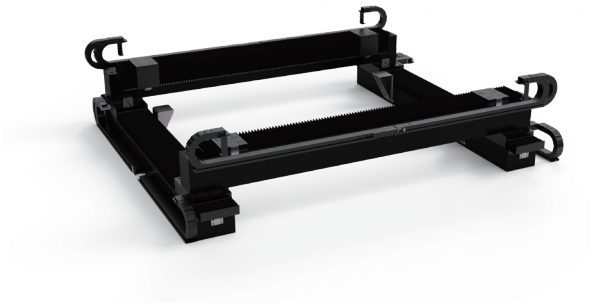
Platform model	PDM-X2830-TY3104	
axial	x-axis	Y-axis
trip	2830 mm	3104 mm
load	Y load+Y self weight+100kg	80Kg
maximum speed	1m/s	1m/s
Maximum acceleration	0.5g	0.5g
repeatability	±5μm	±5μm
Compensation based positioning accuracy	±12μm	±12μm
Sports mode	Move 300mm in 0.5 seconds, stay for 1.5 seconds, 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^-1	100.36 Vpeak/m·s^-1
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-TY3104specifications



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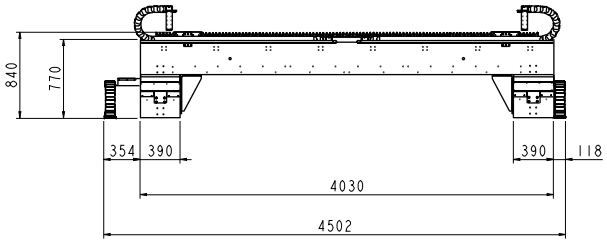
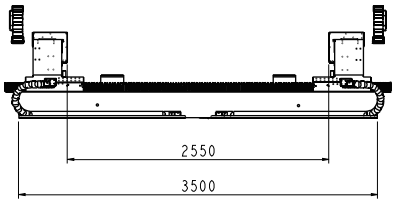
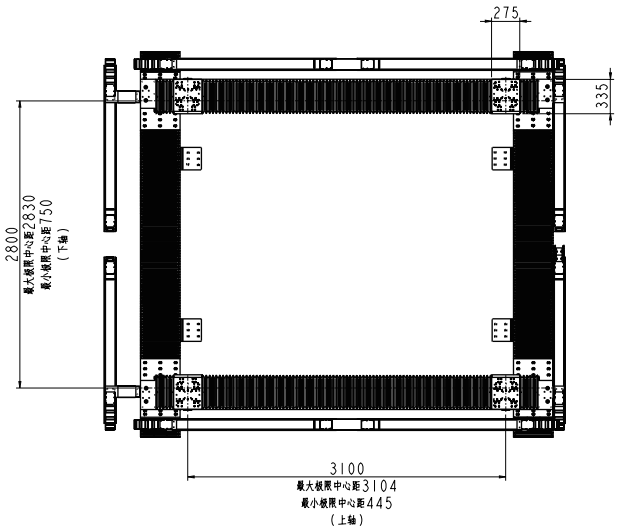
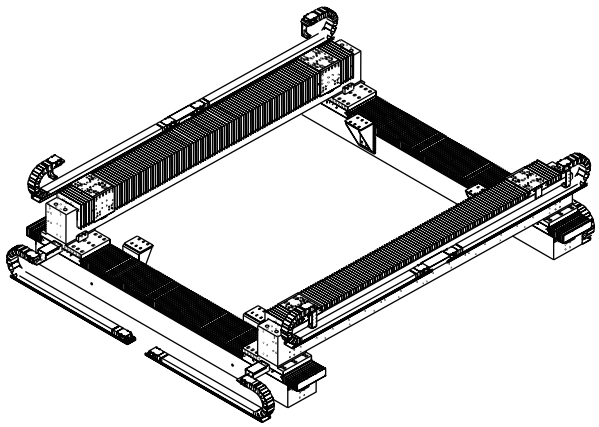








Product Introduction

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

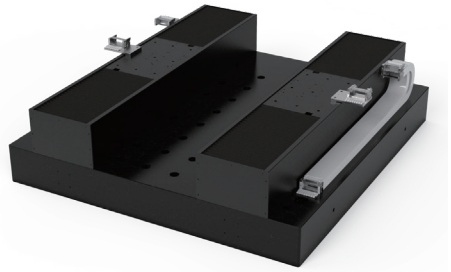
Platform model	PDM-2Y800-SQ
axial	Y-axis (lower axis)
Travel	810 mm (effective travel 770 mm)
load	110Kg
maximum speed	0.5m/s
Maximum acceleration	0.5g
Horizontal straightness	±2.5 μm
Vertical straightness	±2.5 μm
repeatability	±2 μm
Compensation based positioning accuracy	±5μm
Deviation (aw)	±3 arc 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^-1
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-SQspecifications



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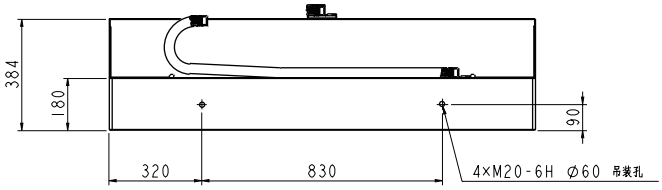
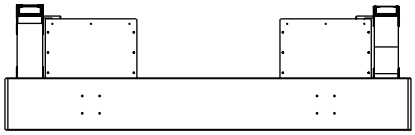
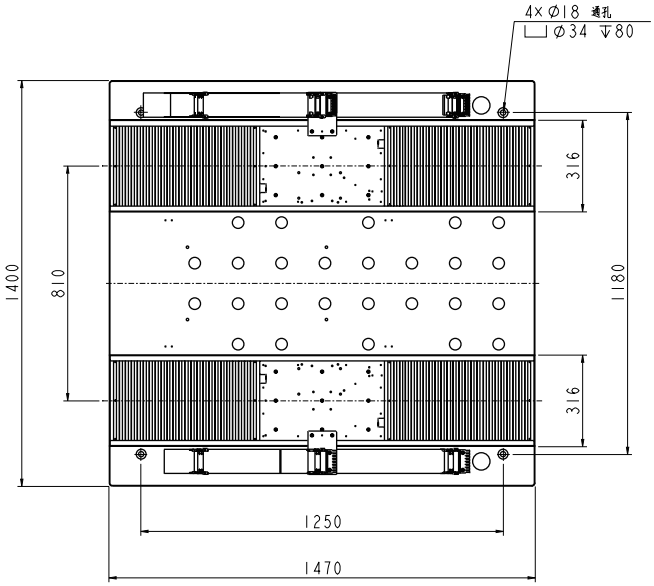
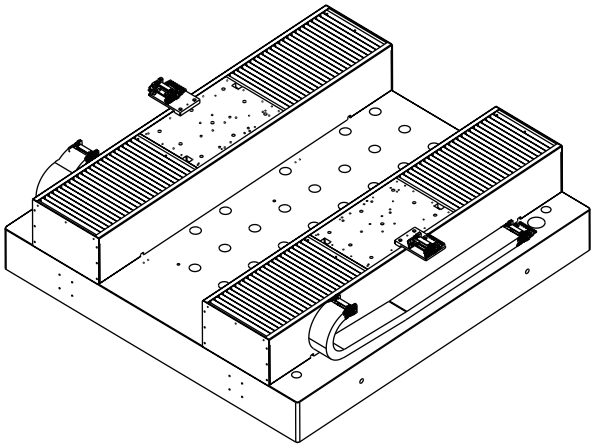








Product Introduction

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

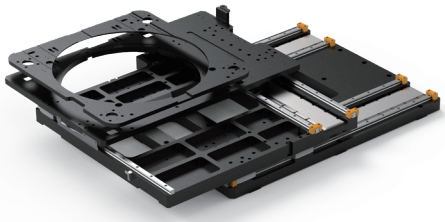
Platform model		PM-X340-Y420-RB0.5
mechanical parameters		
load	kg	30
trip	mm	X.340 Y.420
resolution	μm	0.5
positioning accuracy	μm	10
repeatability	μm	±3
Horizontal straightness	μm	10
Vertical straightness	μm	10
Installation method		level
Motion Parameters		
speed	m/s	1
acceleration	mm/s²	20
stop time	s	0.09
Accessory		
encoder	PCS	2
Photoelectric switch	PCS	2
rail	PCS	7
drag chain	PCS	2
Motor parameters		
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

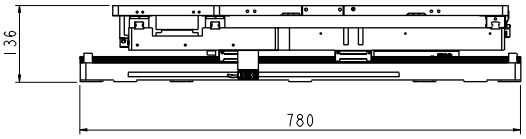
This platform is a precision motion table with a hollow structure, featuring large-sized through holes and high dynamic performance to meet wafer mounting and inspection applications. It is also suitable for other high-end manufacturing industries such as CCD imaging and LED packaging inspection

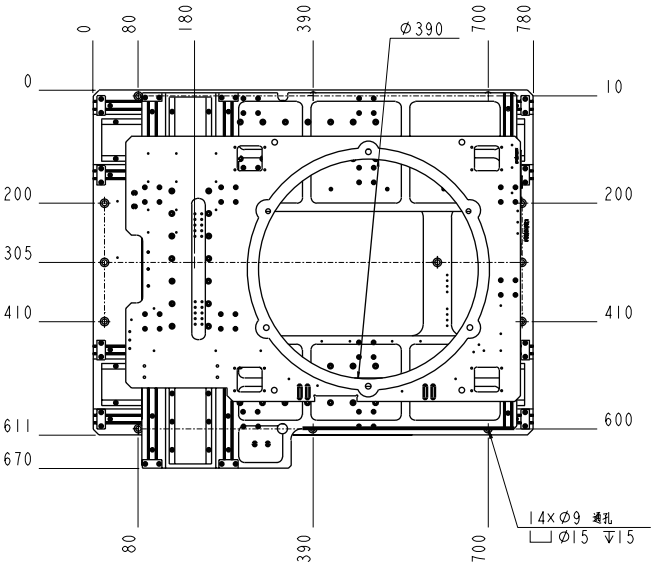
Hollow precision solidification positioning platform

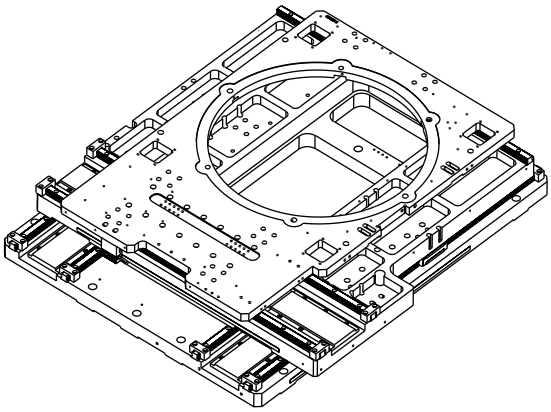
PM-X340-Y420-RB0.5specifications



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	
Motor parameters		
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
Mechanical parameters		
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

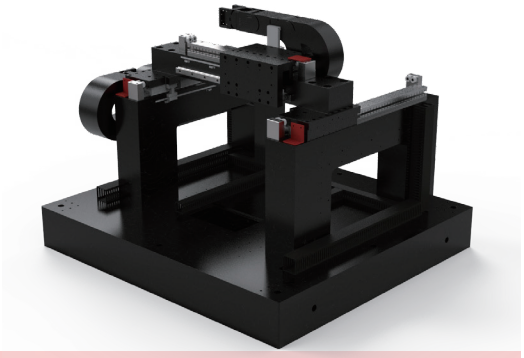
- Adopting ironless linear motor and equipped with non-contact grating ruler
- The repeatability of the entire journey is less than ± 0.5um
- Positioning accuracy less than ± 1um
- Has excellent dynamic performance and positioning accuracy.
- The gantry shaft adopts a dual direct drive structure, which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

Customization

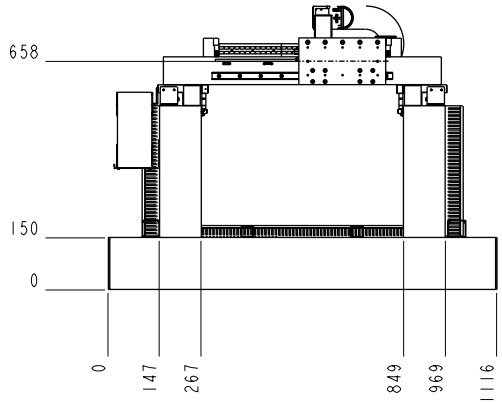
It can be evaluated and customized according to customer needs such as configuration, itinerary, load, special structure, etc

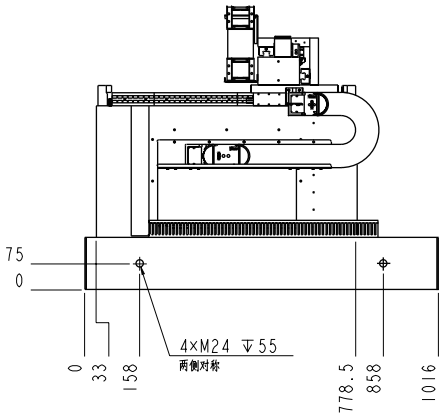
Longmen dual drive precision dispensing platform

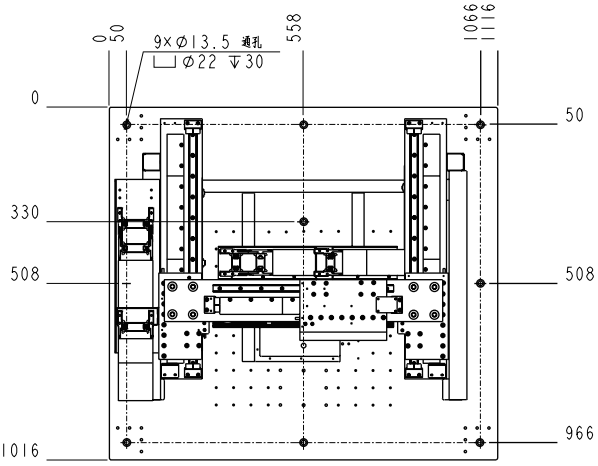
PDM-X200-TY400-DN specifications

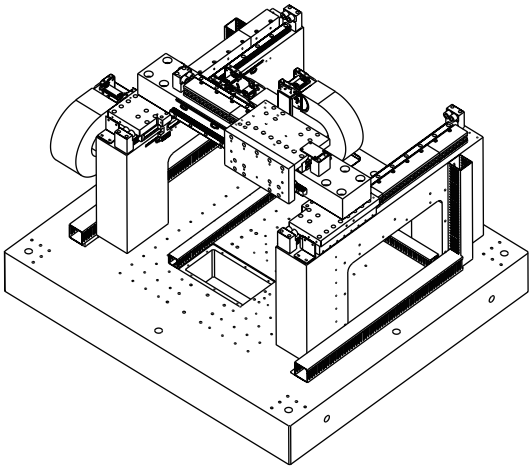


External dimensions









Lithium battery welding stage

Parameter Table

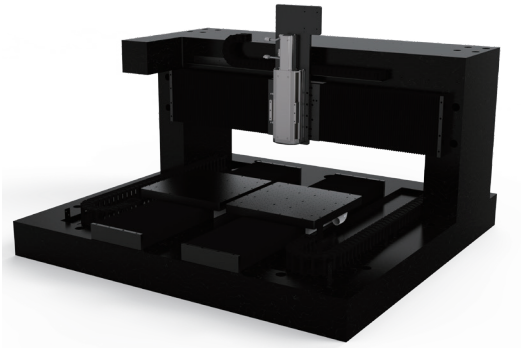
Platform model		PM-X860-Y700-RB0.1
mechanical parameters		
load	kg	X=Z+15 Y=35
trip	mm	X=860 Y=700
resolution	μm	0.1
positioning accuracy	μm	±2
repeatability	μm	±1
parallelism	μm	±4
Vertical straightness	μm	±4
Motion Parameters		
speed	m/s	0.8
acceleration	mm/s²	10
stop time	s	0.5
accessory		
Driver	PCS	3
encoder	PCS	3
Photoelectric switch	PCS	9
rail	PCS	6
Motor parameters		
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



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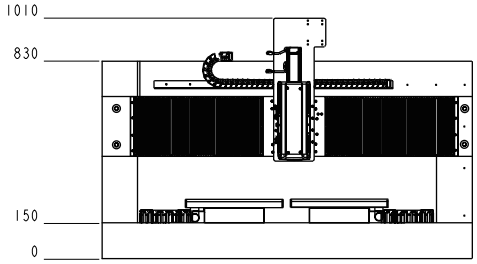

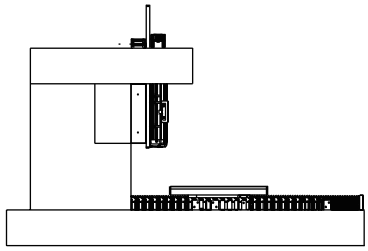

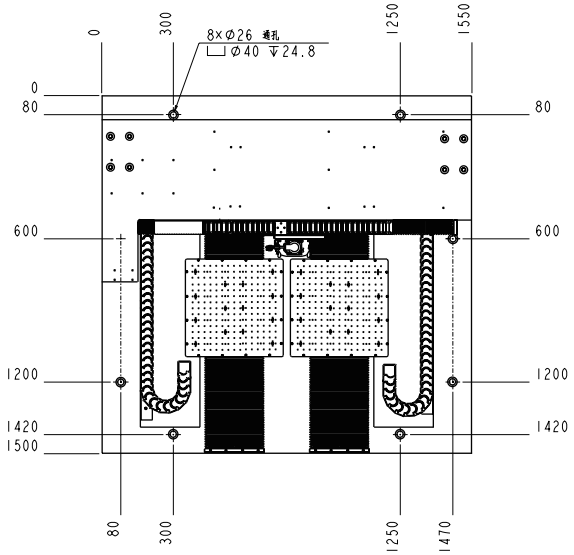

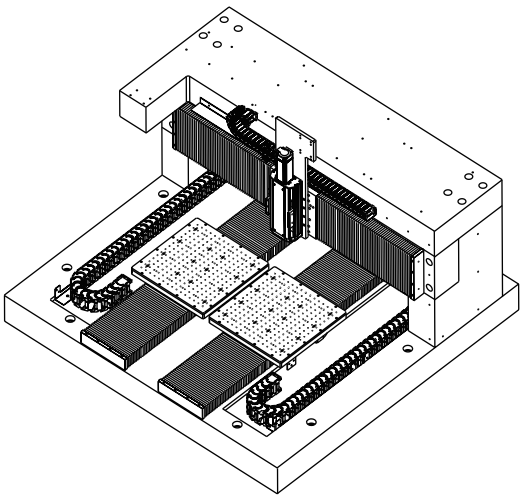

Product Introduction

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

TOKK Robot (Suzhou) Co., Ltd

No. 55 Juhua Road, Wangting Town, Xiangcheng District, Suzhou City, Jiangsu Province

Hotline：400-036-0876

Web：www.tokkrobot.com