

## CREATE OUTSTANDING PRODUCTS WITH CUTTING-EDGE TECHNOLOGY

Robotphoenix is a leading industrial robot manufacturer in China and a national-level Specialized, Sophisticated, New and Unique “Little Giant” Enterprise. Founded in 2012, we focus on the R&D, manufacturing and commercialization of industrial robots, providing integrated automation solutions for the light industry. With self-developed robot manipulators, control and vision systems, we provide a full product portfolio including Delta robots, SCARA robots, AGVs, wafer handling robots and six-axis robots. Our solutions are widely used in 3C electronics, semiconductor, food, daily chemicals, medical, logistics and new energy. Our products sell well across China and are exported to over 20 countries and regions worldwide, highly recognized by global customers for stability and cost-effectiveness.

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## Direct-Drive Vacuum Wafer Handling Robot



RW-V111B

Specifications		
Arm type		Dual-Arm
Travel	Z axis	40mm
	T axis	0~360deg
	R/W axis	351mm (customizable)
Maximum speed	Z axis	250mm/s
	T axis	360deg/s
	R/W axis	1000mm/s
Repetitive positioning accuracy	Z axis	±0.05mm
	T axis	±0.006deg
	R/W axis	±0.05mm
Payload		0.5Kg (including end-effector)
Number of control axes (servo)		3
Cleanliness class		Class1@0.1μm
Mounting type		Top mounting
Total weight		50kg
Vacuum level		<1×10 <sup>-6</sup> Pa
Body leakage rate		<1×10 <sup>-3</sup> std.cc/sec He
Cable length (robot - controller)		3 m (standard)
I/O interface		5IN;8OUT
Power supply		DC48V 25A,DC24V 5A

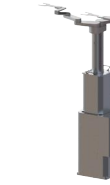
## High-Payload Wafer Handling Robot



RW-A000H

Specifications		
Drive method	R/Z/T axis	Low-voltage servo
Travel	R axis	Arm length: 190 / 260 mm
	Z axis	300/450/500mm
	T axis	0-340°
Maximum speed	R axis	700mm/s
	Z axis	500mm/s
	T axis	130°/s
Repetitive positioning accuracy	R/Z axis	±0.1mm
	Z axis	±0.02°
Cleanliness class		Class 1 @0.1μm
Noise		≤80dB
Power supply		Single-phase AC 220V, 50/60Hz
Cable length		3 m (standard)
Air supply	CDA	Φ6 quick fitting, 0.4~0.6MPa,10NL/min
	Vacuum	-50~-70kPa
Handling vibration value		<0.5g
I/O interface		8IN;8OUT
Mounting type		Top/Bottom mounting
Payload		≤10 kg (including end-effector)
End-effector		Heavy-load fork (customizable)

## Dual-Z Axis Wafer Handling Robot



RW-A222D

Specifications		
Arm type		Dual-Arm
Number of control axes (servo)		5
Travel	Dual Z axis	450mm+450mm
	T axis	0~340°
	R/W axis	720 mm (arm length: 190 mm)
Repetitive positioning accuracy	Z axis	±0.1mm
	T axis	±0.02°
	R/W axis	±0.1mm
Maximum speed	Z axis	500mm/s
	T axis	260°/s
	R/W axis	1100mm/s
Cleanliness class		Class1@0.1μm
Air supply	CDA	Φ6 quick fitting, 0.4~0.6MPa,>20NL/min
	Vacuum	-70~-90kPa
Power supply		Single-phase AC 220V, 50/60Hz
Communication		Ethernet
I/O interface		8IN;8OUT
Rated power		2kW
Mounting type		Bottom mounting
Total weight		55~65kg((Excluding electric cabinet))
Teach pendant		Available (5 m cable length)
Cable length (robot - controller)		3 m (standard)
Electric cabinet dimensions		435x300x155mm



PTE-141

## 4-Port EFEM

Specifications				
Model	PTE-121	PTE-131	PTE-141	
Load Number of ports	2	3	4	
Handling object	300mm wafer: diameter 300 ± 0.2 mm, thickness 775 μm			
Compatible carriers	25-slot 300mm FOUP (SEMI E47.1)			
	25-slot 300mm FOSB (SEMI M31)			
Power supply	Single-phase AC220V ±10%, 50/60Hz ±5%, 4KVA(Including FFU)			
Vacuum	-80kPa~-90kPa			
	40L/min	50L/min	60L/min	
	0.6MPa~0.7MPa			
Compressed air	20L/min	30L/min	40L/min	

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## Product Manual



TOUCH YOUR  
DREAMS  
WITH ROBOT FINGERTIPS

# ROBOT SELECTION OVERVIEW

## Bat-series



Bat360-S1



Bat800-S3



Bat1100-S3



Bat1300-S6



Bat1600-S6



Bat250M-S0.5



Bat360M-S0.5

### Specifications

Configuration	Standard 4-axis					4th axis downward-mounted	
	Bat360-S1	Bat800-S3	Bat1100-S3	Bat1300-S6	Bat1600-S6	Bat250M-S0.5	Bat360M-S0.5
Rated load	1kg	3kg	3kg	6kg	6kg	0.5kg	0.5kg
Workspace diameter	360mm	800mm	1100mm	1300mm	1600mm	250mm	360mm
Number of Axes	4	4	4	4	4	4	4
Repetitive positioning accuracy	±0.05mm	±0.05mm	±0.05mm	±0.05mm	±0.05mm	±0.05mm	±0.05mm
Angular repetitive positioning accuracy	±0.1°	±0.1°	±0.1°	±0.1°	±0.1°	±0.1°	±0.1°
Rated power	0.85kW	3.4kW	3.4kW	6kW	6kW	0.5kW	0.8kW
Weight	25kg	70kg	60kg	100kg	155kg	10kg	24kg
IP rating	IP54	IP54	IP54	IP54	IP54	IP54	IP54

## Bat-series



Bat600M-S3



Bat800M-S3



Bat1100M-S3



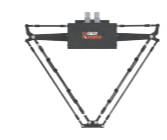
Bat1300M-S15



Bat2000M-S15



Bat1300N-S20



Bat1100B-S6

### Specifications

Configuration	4th axis downward-mounted					Parallel 2+1 axis	Standard 2-axis
	Bat600M-S3	Bat800M-S3	Bat1100M-S3	Bat1300M-S15	Bat2000M-S15	Bat1300N-S20	Bat1100B-S6
Rated load	3kg	3kg	3kg	15kg	15kg	20kg	6kg
Workspace diameter	600mm	800mm	1100mm	1300mm	2000mm	1300mm	1100mm
Number of Axes	4	4	4	4	4	3	2
Repetitive positioning accuracy	±0.05mm	±0.05mm	±0.05mm	±0.1mm	±0.1mm	±0.05mm	±0.08mm
Angular repetitive positioning accuracy	±0.05°	±0.05°	±0.05°	±0.05°	±0.05°	±0.05°	/
Rated power	3.3kW	3.3kW	3.3kW	6.6kW	6.1kW	4.6kW	2.2kW
Weight	69kg	70kg	60kg	125kg	220kg	120kg	87kg
IP rating	IP54	IP54	IP54	IP54	IP54	IP54	IP54

## Python-series



Python450-B6



Python550-B6



Python650-B6



Python800-B20



Python550F-B6



Python450-T6



Python550-T6



Python650-T6



Python800-T20



Python550F-T6

### Specifications

Specifications		Python450-B6	Python550-B6	Python650-B6	Python800-B20	Python550F-B6	Python450-T6	Python550-T6	Python650-T6	Python800-T20	Python550F-T6
		Repetitive positioning accuracy	Joint 1/2	±0.02mm	±0.02mm	±0.02mm	±0.025mm	±0.02mm	±0.02mm	±0.02mm	±0.02mm
Load	Joint 3	±0.01mm	±0.01mm	±0.01mm	±0.01mm	±0.01mm	±0.01mm	±0.01mm	±0.01mm	±0.01mm	±0.01mm
	Joint 4	±0.01°	±0.01°	±0.01°	±0.01°	±0.01°	±0.01°	±0.01°	±0.01°	±0.01°	±0.01°
	Rated	3kg	3kg	3kg	10kg	3kg	3kg	3kg	3kg	10kg	3kg
Working range	Max	6kg	6kg	6kg	20kg	6kg	6kg	6kg	6kg	20kg	6kg
	Working radius	450mm	550mm	650mm	800mm	550mm	450mm	550mm	650mm	800mm	550mm
Rated power	Z-axis travel	240mm	240mm	240mm	208mm	130mm	240mm	240mm	240mm	208mm	130mm
		1.3kW	1.3kW	1.3kW	2.4kW	1.3kW	1.3kW	1.3kW	1.3kW	2.4kW	1.3kW
Mounting type		Table mounting	Table mounting	Table mounting	Table mounting	Ceiling mounting	Table mounting	Table mounting	Table mounting	Table mounting	Ceiling mounting
Weight		24kg(Excluding cable)	25kg(Excluding cable)	26kg(Excluding cable)	40kg(Excluding cable)	20kg(Excluding cable and rack)	24kg(Excluding cable)	25kg(Excluding cable)	26kg(Excluding cable)	40kg(Excluding cable)	20kg(Excluding cable and rack)
IP rating		IP54	IP54	IP54	IP54	IP54	IP54	IP54	IP54	IP54	IP54

## Gorilla-series



Gorilla-A10



Gorilla-S20

### Specifications

Specifications		Gorilla-A10	Gorilla-S20
		Dimensions	99*115*108.3mm
Performance	Processor	J1900	I5-8265U
	Memory	DDR3-4G/8G	DDR4-8G/16G
	Storage	120G(60G/240G/500GOptional)	120G(60G/240G/500GOptional)
	Number of control axes	128 axes	256 axes
	Power fail safeguard	Optional UPS	Optional UPS
Ethernet		Gigabit network interface ×2	Gigabit network interface ×2
EtherCAT		EtherCAT master station ×1	EtherCAT master station ×1
Power supply		24V DC max 3.5A	24V DC max 3.5A
Interface		USB3.0x2	USB3.0x2
Serial communication		RS485x1;RS232x1	RS485x1;RS232x1
Coupler		EC7000	EC7000
IO module		Input, output module ×1 (expandable)	Input, output module ×1 (expandable)
Display interface		HD interface ×1	HD interface ×1
Mounting type		Snap-on	Snap-on

## KingKong-series



KingKong-C1



KingKongNano-ZM

### Specifications

Specifications		KingKong-C1	KingKongNano-ZM
		Performance	CPU
Performance	Memory	8G	4G
	Storage	128G SSD	eMMC 8G
Ethernet		5 ports	4 ports
EtherCAT		EtherCAT master station	EtherCAT master station
USB Interface		USB3.0*2, USB2.0*2	USB3.0*2
Serial communication		RS485*1, RS232*1, 3*COM(DB9 male) RS232 or RS485 mode can be configured via a DIP switch	RS485*1
External vision		Supported	Supported
Integrated vision		Supported	Not supported
Power fail safeguard		Built-in UPS	Supports power failure detection with 5 s power backup
Dimensions		180x129x66mm	170x115x50mm