



Palletizing Workstation Catalog

Palletizing Workstation

TEOTSE can deeply cultivate the application of palletizing industry, cooperate with industry partners, and provide turnkey mode palletizing workstation products for end customers relying on TEOTSE's technical reserve and R&D capability. Excellent application interaction, rapid application deployment, and short investment return period make palletizing a very light work.

TBOT-5.1PS1480-30

Payload: 30kg
Reach: 1480mm

TBOT-5.1PS1680-25

Payload: 25kg
Reach: 1680mm

TBOT-5.1PS1880-20

Payload: 20kg
Reach: 1880mm

TBOT-5.1PS1580-50

Payload: 50kg
Reach: 1580mm

TBOT-5.1PS1780-45

Payload: 45kg
Reach: 1780mm

TBOT-5.1PS1980-40

Payload: 40kg
Reach: 1980mm

Notes:

1. Size limit of a single carton: $\leq 800\text{mm} \times 420\text{mm}$ (from top view)
2. If the weight of a single carton exceeds 30kg, please customize the suction system.

Product Features



01

Easy operation, plug-and-play, and convenient commissioning.



04

With memory function, flexible switching of palletizing schemes.



07

Automatic lifting according to the height of the palletizing, up to 2.5 meters.



02

Small footprint, flexible site layout.



05

Simple parameter input, free selection of stacking patterns, and automatic alignment.



08

All-day operation, saving time, labor, and effort.



03

Compatible with different kinds of boxes and stacks.



06

With mechanical collision prevention, higher safety, can also be equipped with guardrail or light curtains.

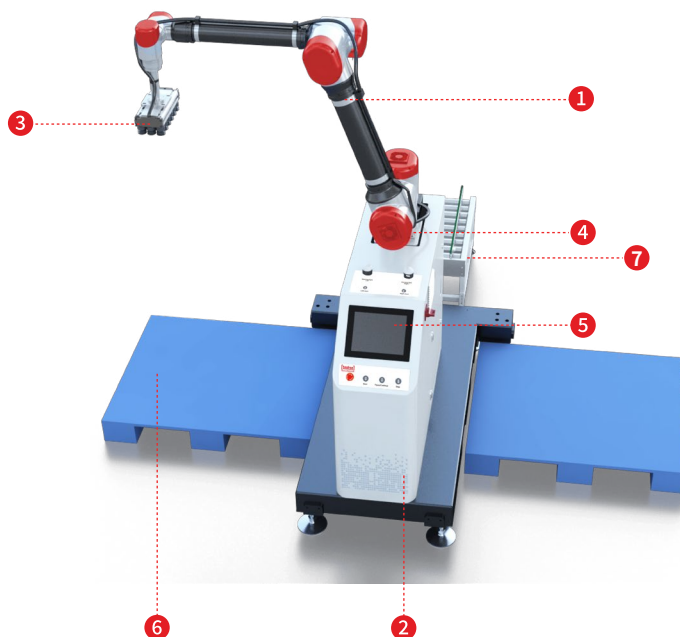


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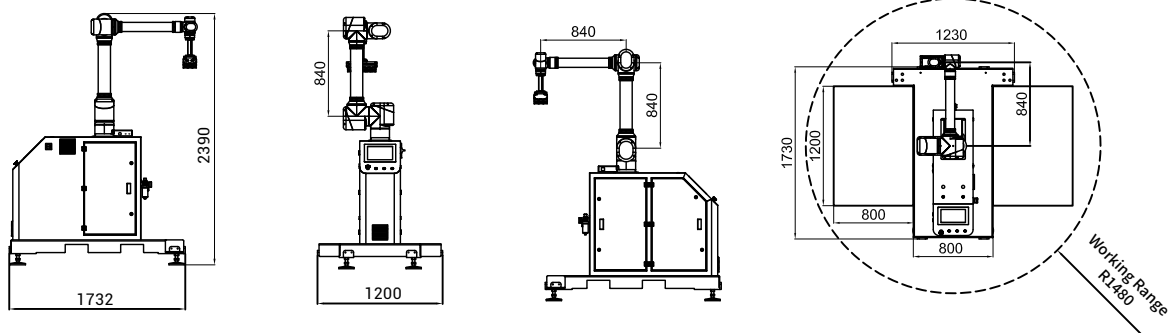
Widely used in various industries such as food, household paper, beverages, pharmaceuticals, daily chemicals, electronics, and appliances.

Product Composition

- 1 Robot
- 2 Electric Controller Cabinet
- 3 End Suction System such as Vacuum Gripper
- 4 Lifting Column
- 5 Teach Pendant With PalletStudio System
- 6 Pallet Positioning System
- 7 Roller Conveyor



Product Dimensions



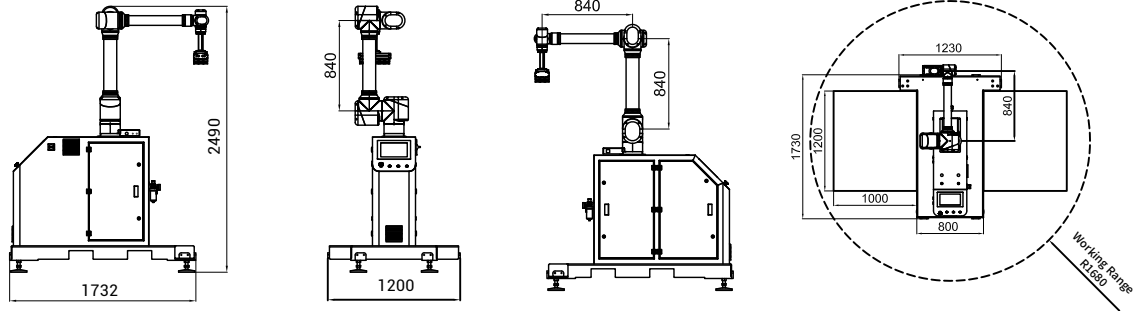
TBOT-5.1PS1480-30 Dimensions (subject to actual objects)

Technical Parameters

Model	TBOT-5.1PS1480-30
Weight	About 600kg
Payload*	30kg
Suction cup weight	10kg
Maximum carton weight	20kg
Reach	1480mm
Maximum palletizing cycle	≤ 8pcs/min
Maximum palletizing height	≤ 2150mm
Repeat positioning accuracy	±0.04mm
Pallet placement form	Manual, one left and one right
Maximum compatible pallet	1000mm*800mm
Dimensions	L1732mm*W1200mm*H2390mm
Dimensions of wooden boxes	L2200mm*W1450mm*H1900mm
Maximum power	3.5KW
Reference gas consumption	240-460L/min
Power supply requirements	AC220V±10%, 50/60Hz±5%
Gas supply requirements	0.5~0.7Mpa
Communication method	Ethernet TCP/IP(master/slave), Modbus TCP(master/slave), Modbus RTU(master/slave), CAN(master/slave)
IP level	Robot arm IP53/Cabinet IP54
Ambient temperature	0-50°C
Noise	<80dB
Main color	Blue gray
The quantity of suction cup	2
Lifting height	Standard configuration includes a 600mm lifting column (Customized lifting column of 600-800mm are available)
Roller conveyor	Standard: 1 roll conveyor with dimensions of L(1m)*W(0.5m)*H(0.6m), equipped with box sensor and start/stop control.
Recommended pallet specifications	1000mm*800mm; 1000mm*1000mm; 1100mm*1000mm; 1100mm*1100mm; 1200mm*800mm

*Payload= Suction cup weight + Maximum carton weight

Product Dimensions



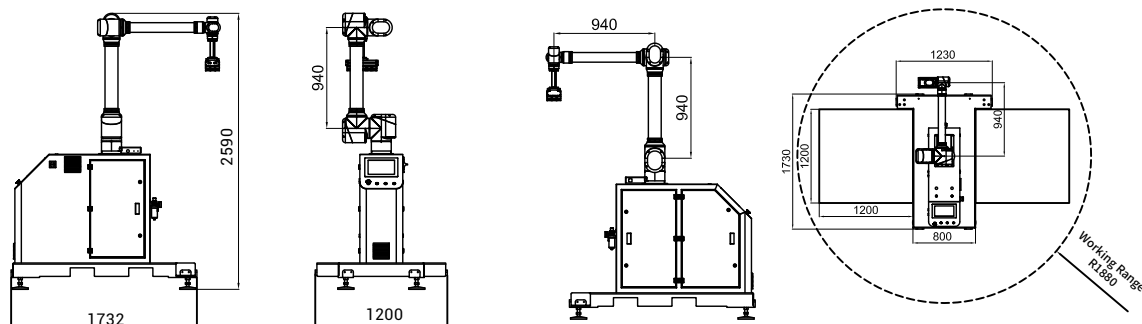
TBOT-5.1PS1680-25 Dimensions (subject to actual objects)

Technical Parameters

Model	TBOT-5.1PS1680-25
Weight	About 600kg
Payload*	25kg
Suction cup weight	7kg
Maximum carton weight	18kg
Reach	1680mm
Maximum palletizing cycle	≤ 10pcs/min
Maximum palletizing height	≤ 2350mm
Repeat positioning accuracy	±0.04mm
Pallet placement form	Manual, one left and one right
Maximum compatible pallet	1200mm*1000mm
Dimensions	L1732mm*W1200mm*H2490mm
Dimensions of wooden boxes	L2200mm*W1450mm*H1900mm
Maximum power	3.5KW
Reference gas consumption	240-460L/min
Power supply requirements	AC220V±10%, 50/60Hz±5%
Gas supply requirements	0.5~0.7Mpa
Communication method	Ethernet TCP/IP(master/slave), Modbus TCP(master/slave), Modbus RTU(master/slave), CAN(master/slave)
IP level	Robot arm IP53/Cabinet IP54
Ambient temperature	0-50°C
Noise	<80dB
Main color	Blue gray
The quantity of suction cup	2
Lifting height	Standard configuration includes a 600mm lifting column (Customized lifting column of 600-800mm are available)
Roller conveyor	Standard:1 roll conveyor with dimensions of L(1m)*W(0.5m)*H(0.6m), equipped with box sensor and start/stop control.
Recommended pallet specifications	1000mm*800mm; 1000mm*1000mm; 1100mm*1000mm; 1100mm*1100mm; 1200mm*800mm; 1200mm*1000mm

*Payload= Suction cup weight + Maximum carton weight

Product Dimensions



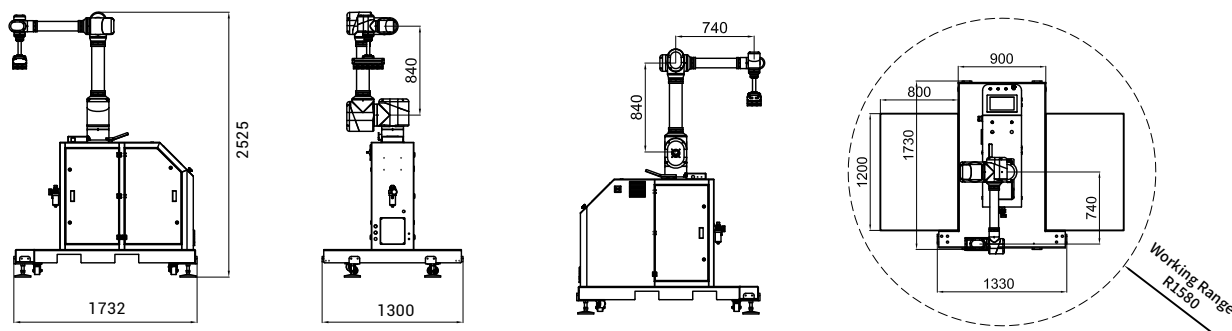
TBOT-5.1PS1880-20 Dimensions (subject to actual objects)

Technical Parameters

Model	TBOT-5.1PS1880-20
Weight	About 600kg
Payload*	20kg
Suction cup weight	7kg
Maximum carton weight	13kg
Reach	1880mm
Maximum palletizing cycle	≤ 12pcs/min
Maximum palletizing height	≤ 2550mm
Repeat positioning accuracy	±0.04mm
Pallet placement form	Manual, one left and one right
Maximum compatible pallet	1300mm*1200mm
Dimensions	L1732mm*W1200mm*H2590mm
Dimensions of wooden boxes	L2200mm*W1450mm*H2000mm
Maximum power	3.5KW
Reference gas consumption	240-460L/min
Power supply requirements	AC220V±10%, 50/60Hz±5%
Gas supply requirements	0.5~0.7Mpa
Communication method	Ethernet TCP/IP(master/slave), Modbus TCP(master/slave), Modbus RTU(master/slave), CAN(master/slave)
IP level	Robot arm IP53/Cabinet IP54
Ambient temperature	0-50°C
Noise	<80dB
Main color	Blue gray
The quantity of suction cup	2
Lifting height	Standard configuration includes a 600mm lifting column (Customized lifting column of 600-800mm are available)
Roller conveyor	Standard:1 roll conveyor with dimensions of L(1m)*W(0.5m)*H(0.6m), equipped with box sensor and start/stop control.
Recommended pallet specifications	1000mm*800mm; 1000mm*1000mm; 1100mm*1000mm; 1100mm*1100mm; 1200mm*800mm; 1200mm*1000mm; 1200mm*1100mm; 1200mm*1200mm; 1300mm*1100mm; 1300mm*1200mm

*Payload= Suction cup weight + Maximum carton weight

Product Dimensions



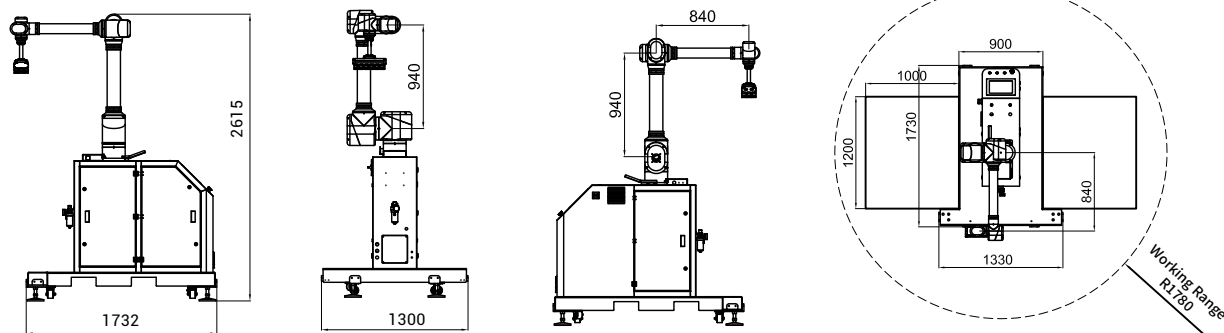
TBOT-5.1PS1580-50 Dimensions (subject to actual objects)

Technical Parameters

Model	TBOT-5.1PS1580-50
Weight	About 650kg
Payload*	50kg
Suction cup weight	12kg
Maximum carton weight	38kg
Reach	1580mm
Maximum palletizing cycle	≤ 6pcs/min
Maximum palletizing height	≤ 2250mm
Repeat positioning accuracy	±0.04mm
Pallet placement form	Manual, one left and one right
Maximum compatible pallet	1200mm*900mm
Dimensions	L1732mm*W1300mm*H2525mm
Dimensions of wooden boxes	L2250mm*W1450mm*H1900mm
Maximum power	3.5KW
Reference gas consumption	240-460L/min
Power supply requirements	AC220V±10%, 50/60Hz±5%
Gas supply requirements	0.5~0.7Mpa
Communication method	Ethernet TCP/IP(master/slave), Modbus TCP(master/slave), Modbus RTU(master/slave), CAN(master/slave)
IP level	Robot arm IP53/Cabinet IP54
Ambient temperature	0-50°C
Noise	<80dB
Main color	Blue gray
The quantity of suction cup	4
Lifting height	Standard configuration includes a 600mm lifting column (Customized lifting column of 600-800mm are available)
Roller conveyor	Standard:1 roll conveyor with dimensions of L(1m)*W(0.5m)*H(0.6m), equipped with box sensor and start/stop control.
Recommended pallet specifications	1000mm*800mm; 1000mm*1000mm; 1100mm*1000mm; 1100mm*1100mm; 1200mm*800mm

*Payload= Suction cup weight + Maximum carton weight

Product Dimensions



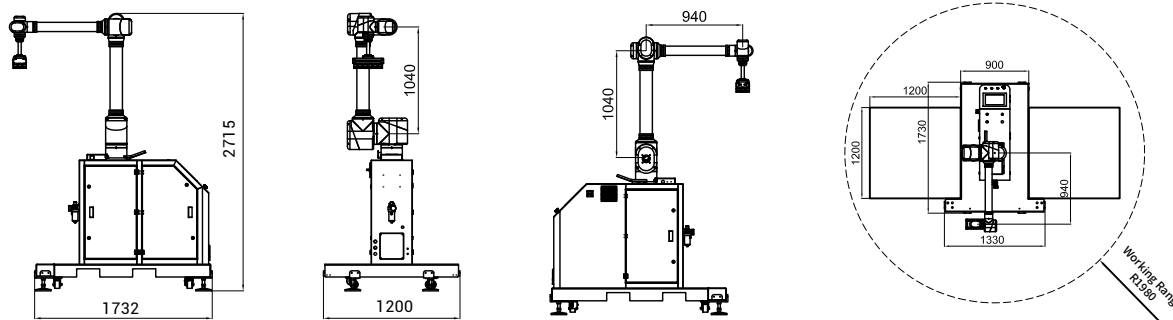
TBOT-5.1PS1780-45 Dimensions (subject to actual objects)

Technical Parameters

Model	TBOT-5.1PS1780-45
Weight	About 650kg
Payload*	45kg
Suction cup weight	12kg
Maximum carton weight	33kg
Reach	1780mm
Maximum palletizing cycle	≤ 6pcs/min
Maximum palletizing height	≤ 2450mm
Repeat positioning accuracy	±0.04mm
Pallet placement form	Manual, one left and one right
Maximum compatible pallet	1200mm*1100mm
Dimensions	L1732mm*W1300mm*H2615mm
Dimensions of wooden boxes	L2250mm*W1450mm*H1900mm
Maximum power	3.5KW
Reference gas consumption	240-460L/min
Power supply requirements	AC220V±10%, 50/60Hz±5%
Gas supply requirements	0.5~0.7Mpa
Communication method	Ethernet TCP/IP(master/slave), Modbus TCP(master/slave), Modbus RTU(master/slave), CAN(master/slave)
IP level	Robot arm IP53/Cabinet IP54
Ambient temperature	0-50°C
Noise	<80dB
Main color	Blue gray
The quantity of suction cup	4
Lifting height	Standard configuration includes a 600mm lifting column (Customized lifting column of 600-800mm are available)
Roller conveyor	Standard:1 roll conveyor with dimensions of L(1m)*W(0.5m)*H(0.6m), equipped with box sensor and start/stop control.
Recommended pallet specifications	1000mm*800mm; 1000mm*1000mm; 1100mm*1000mm; 1100mm*1100mm; 1200mm*800mm; 1200mm*1000mm;1200mm*1100mm

*Payload= Suction cup weight + Maximum carton weight

Product Dimensions



TBOT-5.1PS1980-40 Dimensions (subject to actual objects)

Technical Parameters

Model	TBOT-5.1PS1980-40
Weight	About 650kg
Payload*	40kg
Suction cup weight	10kg
Maximum carton weight	30kg
Reach	1980mm
Maximum palletizing cycle	≤ 6pcs/min
Maximum palletizing height	≤ 2650mm
Repeat positioning accuracy	±0.04mm
Pallet placement form	Manual, one left and one right
Maximum compatible pallet	1300mm*1200mm
Dimensions	L1732mm*W1300mm*H2715mm
Dimensions of wooden boxes	L2250mm*W1450mm*H2000mm
Maximum power	3.5KW
Reference gas consumption	240-460L/min
Power supply requirements	AC220V±10%, 50/60Hz±5%
Gas supply requirements	0.5~0.7Mpa
Communication method	Ethernet TCP/IP(master/slave), Modbus TCP(master/slave), Modbus RTU(master/slave), CAN(master/slave)
IP level	Robot arm IP53/Cabinet IP54
Ambient temperature	0-50°C
Noise	<80dB
Main color	Blue gray
The quantity of suction cup	3
Lifting height	Standard configuration includes a 600mm lifting column (Customized lifting column of 600-800mm are available)
Roller conveyor	Standard:1 roll conveyor with dimensions of L(1m)*W(0.5m)*H(0.6m), equipped with box sensor and start/stop control.
Recommended pallet specifications	1000mm*800mm; 1000mm*1000mm; 1100mm*1000mm; 1100mm*1100mm; 1200mm*800mm; 1200mm*1000mm; 1200mm*1100mm; 1200mm*1200mm; 1300mm*1100mm; 1300mm*1200mm

*Payload= Suction cup weight + Maximum carton weight

Palletizing Workstation

Operator Interface

The Main Page features a top navigation bar with tabs: Working, User Setting, Advanced, Recipe Setting, and Administrator. Below the navigation bar, there are status indicators (stop, run, alarm) and a 'Warning' message. Control buttons include Start, Pause/Continue, Stop, Enable, Go Home, and Reset. A 'Robot speed' field is set to 50.00 % with units UPM and Pcs/m. Below this, there are sections for 'Pallet left status' and 'Pallet right status'. The 'Pallet right status' section includes a 'Close' button, a 'Selected recipe name' field, and 'Finished Box' and 'Finished Pallets' counters, each with a 'Reset Count' button. A small 3D model of a blue pallet is shown on the right.

Main Page

Cl.	Time	St.	Description
1/20/25 3:32:2...			ECAT: Mandatory slave 'ECKIO00_RTU' not found (vendor ID = 2800, product code = 53).
1/20/25 3:32:2...			ECKIO00_RTU: Hardware not found
1/20/25 3:32:2...			InoSV630N_1: Hardware not found
1/20/25 3:32:2...			InoSV630N_2: Hardware not found
1/20/25 3:32:2...			InoSV630N_3: Hardware not found
1/20/25 3:32:2...			InoSV630N_4: Hardware not found
1/20/25 3:32:2...			InoSV630N_5: Hardware not found
1/20/25 3:32:2...			ArtArm.jogPath: unsupported or not achievable default settings have been corrected
1/20/25 3:32:2...			Robot ArtArm (ROBOT) has been created
1/20/25 3:32:2...			System ready
1/20/25 3:32:2...			PalAdv: V3.1.3.6 initializing!
1/20/25 3:32:5...			ArtArm: Not all drives become ready during bootup - check configuration
1/20/25 3:32:5...			HCAxis1: No communication with drive possible.
1/20/25 3:32:5...			HCAxis2: No communication with drive possible.
1/20/25 3:32:5...			HCAxis3: No communication with drive possible.
1/20/25 3:32:5...			HCAxis4: No communication with drive possible.
1/20/25 3:32:5...			HCAxis5: No communication with drive possible.
1/20/25 3:32:5...			HCAux1: No communication with drive possible.
1/20/25 3:32:5...			PalAdv: V3.1.3.6 ready to use
1/20/25 3:42:2...			Appl. Def. Message: Machine, Token, Error, I, ...

At the bottom, there are buttons: Confirm, Confirm all, Help, Disp. ID.

Alarm Page

The User Control Permissions screen has a top navigation bar with tabs: Working, User Setting, Advanced, Recipe Setting, and Administrator. It features a 'Settings' section with 'Language' (Chinese), 'Date and Time', and 'Auto Logout'. A 'Login' table is displayed with columns: User, Local, Remote, Language, and Unit. Below the table are buttons for 'New User', 'Delete User', and 'Modify Profile'. A 'User' dropdown menu is at the bottom left.

User	Local	Remote	Language	Unit
Administrator	16	16	Chinese	ISO Absolute
operator	1	1	English	ISO Absolute
service	15	15	English	ISO Absolute
teacher	7	7	English	ISO Absolute

User Control Permissions

The Robot Pick-and-place Compensation and Delay Settings screen has a top navigation bar with tabs: Working, User Setting, Advanced, Recipe Setting, and Administrator. It features a 'Position offset' section with a 'Multi pick place' button. Below this, there are input fields for 'Pre Pick pos offset', 'Post pick height offset', 'Aux1UpHeight', and 'Aux1_DownPosition'. To the right, there are input fields for 'PickUpDelay', 'Place delay', and 'Push Time'. Below these, there are sections for 'Place pos offset' with input fields for 'BoxDelay_Left', 'BoxDelay_Right', and various entry position offsets (0, 0, 0, 0, 0, 0, 0, 0). At the bottom, there are buttons: User Setting, < Back.

Robot Pick-and-place Compensation and Delay Settings

Input	Comment	Input	Comment
DI0	DI0_Estop	DI1	BoxSensor3
DI2	DI2_Start	DI3	DI3_Stop
DI4	DI4_Pause	DI5	DI5_LeftRun
DI6	DI6_RightRun	DI7	Box Sensor 1
DI8	Box Sensor 2	DI9	DI9_VaccumCheck1
DI10	SafeDoorLeft	DI11	DI11_SafeDoorRight
DI12	DI12_BackSafetyDoor	DI13	Box Sensor4
DI14	DI14_VaccumCheck2	DI15	DI15_VaccumCheck3

At the bottom, there are buttons: Advanced, Manufacturer settings, User, Alarm, < Back.

Robot IO Input Monitoring

Output	Comment	Output	Comment
DO0	DO0_GreenLeft	DO1	DO1_YellowLeft
DO2	DO2_RedLeft	DO3	DO3_BuzzerLeft
DO4	DO4_GreenRight	DO5	DO5_YellowRight
DO6	DO6_RedRight	DO7	DO7_BuzzerRight
DO8	DO8_XqQ	DO9	DO9_ChuiQi
DO10	DO10_Vaccum3	DO11	DO11_Blow3
DO12	DO12_XqQ2	DO13	DO13_Blow2
DO14	Empty	DO15	Empty

At the bottom, there are buttons: Advanced, Manufacturer settings, User, Alarm, < Back.

Robot IO Output Monitoring

Palletizing Workstation

Operator Interface

Carton Grabbing Configuration

Carton Stacking Configuration

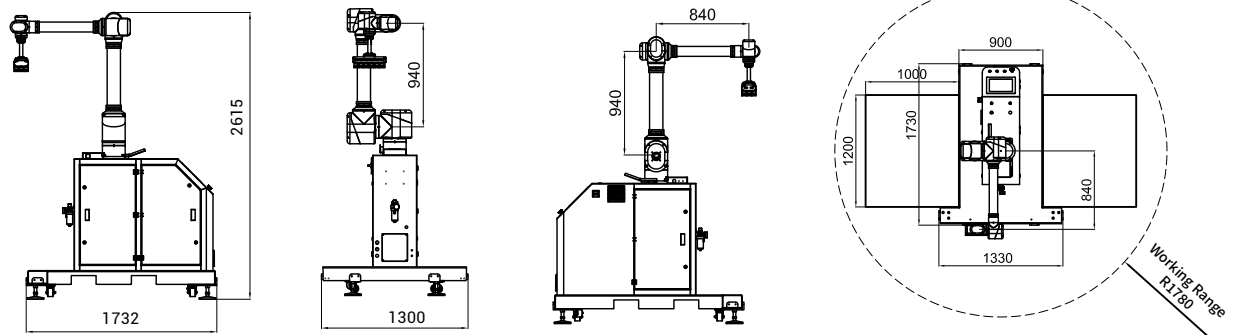
Robot Single-axis Jog Page

Robot Jog Button

Anti-collision Settings

Anti-collision Detection

Manufacturer's Pallet
Parameter Settings



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