



# AWP Series Cobot Palletizing Workstation Catalog

## AWP Series Palletizing Workstation

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

### AWP-20S

Payload: 30kg  
Reach: 1480mm

### AWP-20

Payload: 25kg  
Reach: 1680mm

### AWP-20L

Payload: 20kg  
Reach: 1880mm

### AWP-40S

Payload: 50kg  
Reach: 1580mm

### AWP-40

Payload: 45kg  
Reach: 1780mm

### AWP-40L

Payload: 40kg  
Reach: 1980mm



## Product features

### 01

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

### 02

Small footprint, flexible site layout

### 03

Compatible with different kinds of boxes and stacks

### 04

With memory function, flexible switching of palletizing recipes

### 05

Simple parameter input, free selection of palletizing patterns, and automatic alignment

### 06

With mechanical collision prevention, higher safety, can also be equipped with safety fence or safety light curtain.

### 07

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

### 08

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

### 09

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

## Product composition

1 Collaborative robot

2 Electric controller cabinet

3 Suction cup gripper

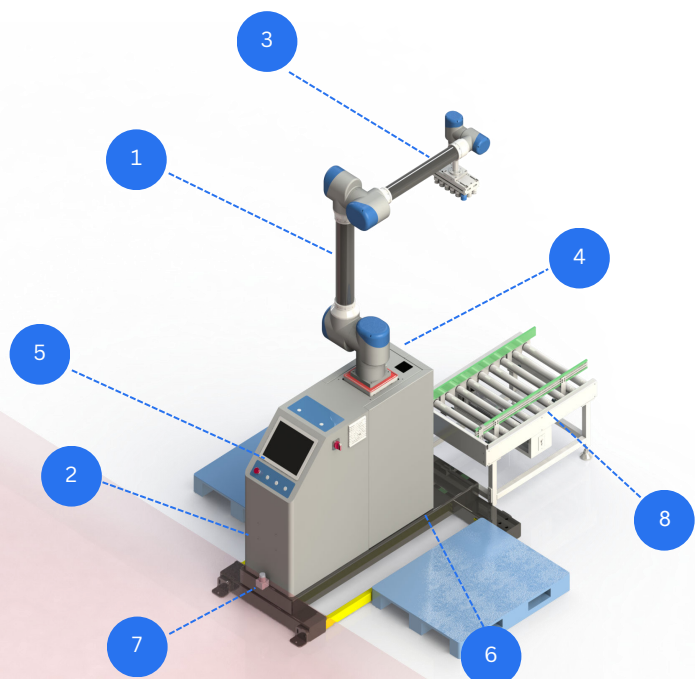
4 Lifting column

5 Teach pendant with PalletStudio System

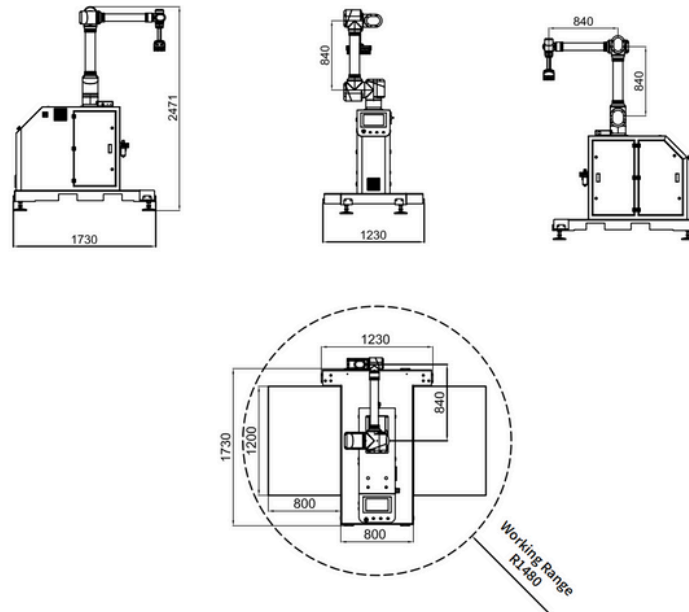
6 Movable base and pallet positioning system

7 LiDAR area sensor

8 Roller conveyor with box detection sensors



## Product dimensions

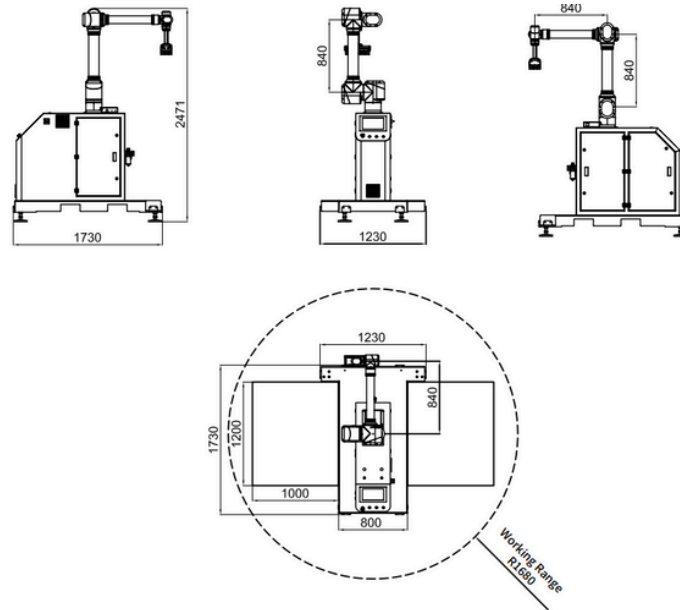


AWP-20S Dimensions (subject to actual objects)

## Technical parameters

Model	AWP-20S	System Inputs/Outputs	32 Digital Inputs/Outputs
Weight	~600 kg	Maximum box detection	4 boxes
Payload	30 kg	Safety features	Collision detection LiDAR area sensors
Reach	1480 mm	Number of LiDAR	1 sensors (front)
Maximum palletizing cycle	≤8 pcs/min	Detection range (target 10% reflectivity)	8 m
Maximum palletizing height	≤2350 mm	Maximum detection range	0.05 - 25 m
Repeatability	±0.05 mm	Measurement accuracy	±3 cm
Maximum compatible pallet	1200*1000 mm	Resolution	5 mm at 3 m 10 mm at 5 m 15 mm at 8 m
Dimensions	L1230*W1730*H2471 mm	Scanning frequency	15 Hz
Storage box dimensions	L2200*W1450*H1900 mm	Laser type	905 nm, Class 1 eye-safe laser (Complies with GB7247.1-2012)
Maximum power consumption	3.5 kw		
Power supply	1-phase 220 VAC ±10 % at 50 Hz ±5 %		
Compressed air consumption	240 - 460 L/min		
Compressed air supply	0.5 - 0.7 Mpa (5-7 Bar)		
IP rating	IP54		
Operating temperature	0-50 °C		

## Product dimensions

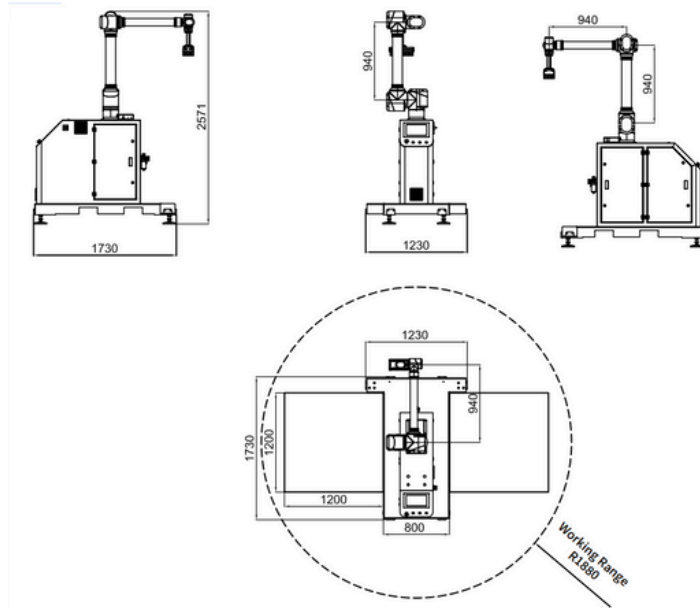


AWP-20 Dimensions (subject to actual objects)

## Technical parameters

Model	AWP-20	System Inputs/Outputs	32 Digital Inputs/Outputs
Weight	~600 kg	Maximum box detection	4 boxes
Payload	25 kg	Safety features	Collision detection LiDAR area sensors
Reach	1680 mm	Number of LiDAR	1 sensors (front)
Maximum palletizing cycle	≤10 pcs/min	Detection range (target 10% reflectivity)	8 m
Maximum palletizing height	≤2450 mm	Maximum detection range	0.05 - 25 m
Repeatability	±0.05 mm	Measurement accuracy	±3 cm
Maximum compatible pallet	1200*1100 mm	Resolution	5 mm at 3 m 10 mm at 5 m 15 mm at 8 m
Dimensions	L1230*W1730*H2471 mm	Scanning frequency	15 Hz
Storage box dimensions	L2200*W1450*H1900 mm	Laser type	905 nm, Class 1 eye-safe laser (Complies with GB7247.1-2012)
Maximum power consumption	3.5 kw		
Power supply	1-phase 220 VAC ±10 % at 50 Hz ±5 %		
Compressed air consumption	240 - 460 L/min		
Compressed air supply	0.5 - 0.7 Mpa (5-7 Bar)		
IP rating	IP54		
Operating temperature	0-50 °C		

## Product dimensions

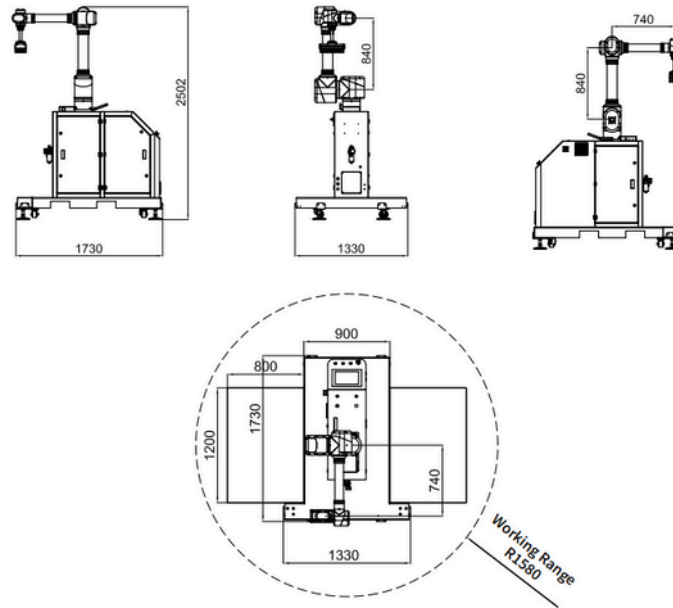


AWP-20L Dimensions (subject to actual objects)

## Technical parameters

Model	AWP-20L	System Inputs/Outputs	32 Digital Inputs/Outputs
Weight	~600 kg	Maximum box detection	4 boxes
Payload	20 kg	Safety features	Collision detection LiDAR area sensors
Reach	1880 mm	Number of LiDAR	1 sensors (front)
Maximum palletizing cycle	≤12 pcs/min	Detection range (target 10% reflectivity)	8 m
Maximum palletizing height	≤2550 mm	Maximum detection range	0.05 - 25 m
Repeatability	±0.05 mm	Measurement accuracy	±3 cm
Maximum compatible pallet	1300*1200 mm	Resolution	5 mm at 3 m 10 mm at 5 m 15 mm at 8 m
Dimensions	L1230*W1730*H2471 mm	Scanning frequency	15 Hz
Storage box dimensions	L2200*W1450*H1900 mm	Laser type	905 nm, Class 1 eye-safe laser (Complies with GB7247.1-2012)
Maximum power consumption	3.5 kw		
Power supply	1-phase 220 VAC ±10 % at 50 Hz ±5 %		
Compressed air consumption	240 - 460 L/min		
Compressed air supply	0.5 - 0.7 Mpa (5-7 Bar)		
IP rating	IP54		
Operating temperature	0-50 °C		

## Product dimensions

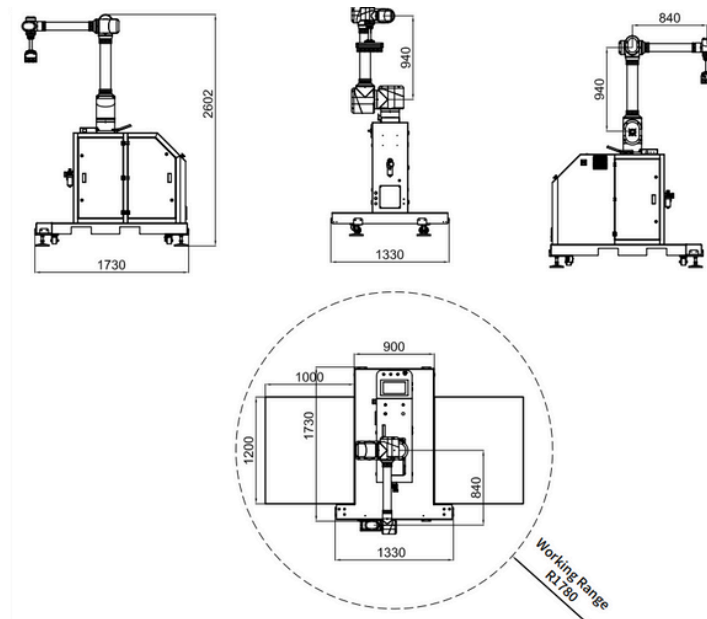


AWP-40S Dimensions (subject to actual objects)

## Technical parameters

Model	AWP-40S	System Inputs/Outputs	32 Digital Inputs/Outputs
Weight	~650 kg	Maximum box detection	4 boxes
Payload	50 kg	Safety features	Collision detection LiDAR area sensors
Reach	1580 mm	Number of LiDAR	1 sensors (front)
Maximum palletizing cycle	≤6 pcs/min	Detection range (target 10% reflectivity)	8 m
Maximum palletizing height	≤2450 mm	Maximum detection range	0.05 - 25 m
Repeatability	±0.05 mm	Measurement accuracy	±3 cm
Maximum compatible pallet	1200*1000 mm	Resolution	5 mm at 3 m 10 mm at 5 m 15 mm at 8 m
Dimensions	L1330*W1730*H2502 mm	Scanning frequency	15 Hz
Storage box dimensions	L2250*W1450*H1900 mm	Laser type	905 nm, Class 1 eye-safe laser (Complies with GB7247.1-2012)
Maximum power consumption	3.5 kw		
Power supply	1-phase 220 VAC ±10 % at 50 Hz ±5 %		
Compressed air consumption	240 - 460 L/min		
Compressed air supply	0.5 - 0.7 Mpa (5-7 Bar)		
IP rating	IP54		
Operating temperature	0-50 °C		

## Product dimensions



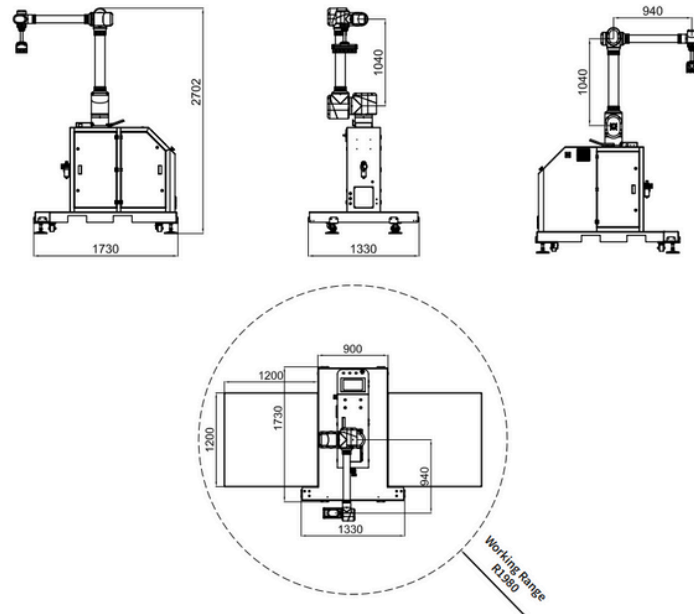
AWP-40 Dimensions (subject to actual objects)

## Technical parameters

Model	AWP-40	System Inputs/Outputs	32 Digital Inputs/Outputs
Weight	~650 kg	Maximum box detection	4 boxes
Payload	45 kg	Safety features	Collision detection LiDAR area sensors
Reach	1780 mm	Number of LiDAR	1 sensors (front)
Maximum palletizing cycle	≤8 pcs/min	Detection range (target 10% reflectivity)	8 m
Maximum palletizing height	≤2550 mm	Maximum detection range	0.05 - 25 m
Repeatability	±0.05 mm	Measurement accuracy	±3 cm
Maximum compatible pallet	1200*1200 mm	Resolution	5 mm at 3 m 10 mm at 5 m 15 mm at 8 m
Dimensions	L1330*W1730*H2602 mm	Scanning frequency	15 Hz
Storage box dimensions	L2250*W1450*H1900 mm	Laser type	905 nm, Class 1 eye-safe laser (Complies with GB7247.1-2012)
Maximum power consumption	3.5 kw		
Power supply	1-phase 220 VAC ±10 % at 50 Hz ±5 %		
Compressed air consumption	240 - 460 L/min		
Compressed air supply	0.5 - 0.7 Mpa (5-7 Bar)		
IP rating	IP54		
Operating temperature	0-50 °C		



## Product dimensions



AWP-40L Dimensions (subject to actual objects)

## Technical parameters

Model	AWP-40L	System Inputs/Outputs	32 Digital Inputs/Outputs
Weight	~650 kg	Maximum box detection	4 boxes
Payload	40 kg	Safety features	Collision detection LiDAR area sensors
Reach	1980 mm	Number of LiDAR	1 sensors (front)
Maximum palletizing cycle	≤10 pcs/min	Detection range (target 10% reflectivity)	8 m
Maximum palletizing height	≤2650 mm	Maximum detection range	0.05 - 25 m
Repeatability	±0.05 mm	Measurement accuracy	±3 cm
Maximum compatible pallet	1400*1200 mm	Resolution	5 mm at 3 m 10 mm at 5 m 15 mm at 8 m
Dimensions	L1330*W1730*H2702 mm	Scanning frequency	15 Hz
Storage box dimensions	L2250*W1450*H1900 mm	Laser type	905 nm, Class 1 eye-safe laser (Complies with GB7247.1-2012)
Maximum power consumption	3.5 kw		
Power supply	1-phase 220 VAC ±10 % at 50 Hz ±5 %		
Compressed air consumption	240 - 460 L/min		
Compressed air supply	0.5 - 0.7 Mpa (5-7 Bar)		
IP rating	IP54		
Operating temperature	0-50 °C		

# AWP Series Palletizing Workstation

## Operator Interface

Working User Setting Advanced Recipe Setting Administrator

50% **Warning** Appl. Def. Message: ✓

**Start** **Pause/Con...** **Stop**

**Enable** **GoHome** **Reset**

Robot speed 50.00 % UPM 0.00 Pcs/m

Pallet left status Pallet right status

PalletLeft Active ☐ Close

Selected recipe name

Pallet total Num. 0

Finished Box 0 Reset Count 0

Finished Pallets 0 Reset 0

Working

Main Page

Working User Setting Advanced Recipe Setting Administrator

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: 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 3:42:2...			PalAdv: V3.1.3.6 ready to use
1/20/25 3:42:2...			Appl. Def. Message: Machine, Token, Error, I, ...

Confirm Confirm all Help Disp. ID

Alarm Page

Settings

Language: Login Online Administration Configuration

Date and Time: User Local Remote Language Unit

Auto Logout: Administrator 16 16 Chinese ISO Absolute

System Information: operator 1 1 English ISO Absolute

User: service 15 15 English ISO Absolute

HMI-Version: teacher 7 7 English ISO Absolute

Device-IP: New User Delete User Modify Profile

Host-IP: User Display System Lock Report Masks

User Control Permissions

Working User Setting Advanced Recipe Setting Administrator

Position offset Multi pick place Other set

Pick pos offset

Pre Pick pos offset 0 mm PickUpDelay 200 ms

Post pick height offset 0 mm Place delay 200 ms

Aux1UpHeight 150.00 mm Push Time 500 ms

Aux1\_DownPosition 0.00 mm

Place pos offset

BoxDelay\_Left 500 ms BoxDelay\_Right 500 ms

Left entry position offset(O) 0 mm Right entry position offset(O) 0 mm

Left entry position offset(O') 0 mm Right entry position offset(O') 0 mm

Left entry (Z) offset (under box) 0 mm Right entry (Z) offset (under box) 0 mm

Left entry (Z) offset (up box) 0 mm Right entry (Z) offset (up box) 0 mm

Left post-place (Z) offset 0 mm Right post-place (Z) offset 0 mm

User Setting < Back

Robot Pick-and-place Compensation and Delay Settings

Working User Setting Advanced Recipe Setting Administrator

Robot Jog	IO Monitor	Output Monitor	Collision Set	Collision Detection	Device Active	Communication Setting
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			

Advanced Manufacturer settings User Alarm < Back

Robot IO Input Monitoring

Working User Setting Advanced Recipe Setting Administrator

Robot Jog	IO Monitor	Output Monitor	Collision Set	Collision Detection	Device Active	Communication Setting
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			

Advanced Manufacturer settings User Alarm < Back

Robot IO Output Monitoring

# AWP Series Palletizing Workstation

## Operator Interface

Working User Setting Advanced Recipe Setting Administrator

Recipe Choose **Box Angle**

Recipe choose

Box Kinds One Kind Box Box Cnv Number One Conveyor

Box 1 recipe

Recipe choose

Recipe description

X -1000.00 mm Y 0.00 mm Z -300.00 mm C 0.00

Box 1 Pick Pos

箱子中心

X+ Y+ Z+ C+ X- Y- Z- C-

Teach(2S)

Box Weight 5.00 Kg Box L: 0.00 Box W: 0.00 Box H: 0.00

Recipe Setting Box Pallet Config < Back

Carton Grabbing Configuration

16 50% 报警中 Control...

Palletizer Advanced

Recipe name

Current selected recipe info

This container shows information about the selected recipe. To create a new recipe press 'New'. To delete the recipe press 'Delete'. The recipe is saved as file and can be imported or exported.

Recipe description:

Pallet Length X 0.000 mm

Pallet Width Y 0.000 mm

Inlay Thickness 0.00 mm

Products configured 0

Layers configured 0

Amount of Layers 0

New Delete Import Export Edit > < Back

Carton Stacking Configuration

Working User Setting Advanced Recipe Setting Administrator

Robot Jog JO Monitor Output Monitor Collision Set Collision Detection Device Active Communication Setting

Jog Axis Jog Cartesian Monitor Speed 50.00 % Enable

Enable Set Zero(Press 2S)

A1 0.00 \* Jog- Jog+ A1Set 0

A2 0.00 \* Jog- Jog+ A2Set 0

A3 0.00 \* Jog- Jog+ A3Set 0

A4 0.00 \* Jog- Jog+ A4Set 0

A5 0.00 \* Jog- Jog+ A5Set 0

Ax1 0.00 mm Jog- Jog+ AxUpSet 0

Advanced Manufacturer settings User Alarm < Back

Robot Single-axis Jog Page

Working User Setting Advanced Recipe Setting Administrator

Robot Jog JO Monitor Output Monitor Collision Set Collision Detection Device Active Communication Setting

Jog Axis Jog Cartesian Monitor Speed 50.00 % Enable

X 0.00 mm Jog- Jog+

Y 0.00 mm Jog- Jog+

Z 0.00 mm Jog- Jog+

C 0.00 \* Jog- Jog+

Ax1 0.00 mm Jog- Jog+

Advanced Manufacturer settings User Alarm < Back

Robot Jog Button

Working User Setting Advanced Recipe Setting Administrator

Robot Jog JO Monitor Output Monitor Collision Set Collision Detection Device Active Communication Setting

Enable

Show Normal Page

Set value

Normal speed(m) Acc speed(m) Delay

A1 alarm threshold 0.00 0.00

A2 alarm threshold 0.00 0.00

A3 alarm threshold 0.00 0.00

A4 alarm threshold 0.00 0.00

A5 alarm threshold 0.00 0.00

Aux1 alarm threshold 0.00 0.00

Cycle 5

Advanced Manufacturer settings User Alarm < Back

Anti-collision Settings

Working User Setting Advanced Recipe Setting Administrator

Robot Jog JO Monitor Output Monitor Collision Set Collision Detection Device Active Communication Setting

Size Normal Fast

Calibration Value

Normal speed(m) Acc speed(m)

A1 alarm threshold 0.00 0.00

A2 alarm threshold 0.00 0.00

A3 alarm threshold 0.00 0.00

A4 alarm threshold 0.00 0.00

A5 alarm threshold 0.00 0.00

Aux1 alarm threshold 0.00 0.00

Redundancy 30 %

Initiation Start detection Write In

Advanced Manufacturer settings User Alarm < Back

Anti-collision Detection

Working User Setting Advanced Recipe Setting Administrator

Stacking plate coordinate system Advanced Parameter Other setting

RobotSpeedLimit 100.00 % PalletTest\_Left PalletTest\_Right

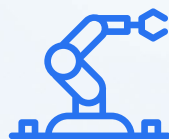
X -500.00 mm Y -400.00 mm Z -1000.00 mm

Weight of stacker 3.55 Kg

Left height offset -100.00 mm Right height offset -100.00 mm

Advanced Manufacturer settings User Alarm < Back

Manufacturer's Pallet Parameter Settings



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## **AUCTECH Robotics**

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