

## LEANTEC ROBOT EMPOWER CNC APPLICATION





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## 

**Company Profile** / 01 / 03 **Robot Products** / 43 Flexible Robot Cell Products / 47 Handling Peripheral Devices / 55 **Robot Applications** / 61 **Robot Controllers** 63 **System Functions** 65 Leantec Cloud Product



### ABOUT LEANTEC

29<sup>+</sup>

29-year Experience

1

All in 1 Service

50<sup>+</sup>

50+ Service Locations

**NO.1** 

PC base No.1

Syntec' 29-year experience in the motion control R&D and service PC base No.1

Integrated automation system one-stop service

Provide automation products & overall on-line industrial solutions, including both software and hardware

50+ Global service stations

Taiwan team independent research and development with the leading strength and cooperation with multi-brands

Complete ecosystem to ensure rapid integration

LEANTEC INTELLIGENCE ABOUT LEANTEC 01/02

Leantec Intelligence Co., Ltd. (hereinafter referred to as "Leantec Intelligence") was established in 2018 and funded by Syntec Group. Leantec Intelligence has always been committed to providing manufacturing enterprises with integrated solutions for smart manufacturing based on the Syntec control technology. The core businesses include industrial robots, cloud products (to serve smart clouds and produce smart clouds), automation system integration, various electromechanical modules and smart manufacturing supporting accessories (e.g. smart edge, smart gripper and so on). Furthermore, it aims to help companies improve their production efficiency and product quality and promote industrial upgrading.

Founded in 1995, Syntec Group has long been engaged in the research, development and manufacturing of software and hardware technology for controllers in the field of machine tools and automation tools. It is among the most influential controller brands in the Asia-Pacific market.

Leantec Intelligence, a practitioner of the intelligent manufacturing of the Syntec Group, has attracted professionals from the Syntec Group and intelligent manufacturing-related industries and is committed to providing customers with complete and professional solutions based on our understanding and accumulated knowledges in the machine tool industry and intelligent manufacturing field. Meanwhile, we aim to help enterprises achieve informatization, automation and intelligence, improve their efficiency and gain more market competition.

Our visions: Most trustworthy electronic control partner Our missions: Complete intelligent factory solution



## ROBOTINTRODUCTION

#### **Robot Serial Products**

LEANTEC ROBOT

EMPOWER CNC APPLICATION



# LEANTEC INTELLIGENCE





#### **Robot Products**

#### **R** Series

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High-precision, high-speed, compact and small footprint design. With high IP rating, the robot is protected against cutting fluid and can be installed inside a machine. It is recommended for high-precision tool grinder, pick and place applications.

Type R	Payload(kg)	Reach(mm)	Pos.rep(mm)	Mounting	Protection	Axes	Remark
LA580-4H	4	580	±0.02	Floor, Upside-down, Angle	IP67	6	Hollow wrist, optional no electric cabinet
LA707-7H	7	707	±0.02	Floor, Upside-down, Angle	IP67	6	Hollow wrist, optional no electric cabinet
LA906-7	7	906	±0.03	Floor, Upside-down, Angle	IP67	6	Standard, optional no electric cabinet
LA1206-10	10	1206	±0.05	Floor, Upside-down, Angle	IP54	6	Standard, optional no electric cabinet
LA1813-25	25	1813	±0.05	Floor, Upside-down, Angle	Wrist part IP67 Base part IP65	6	Standard
LA1813-35	35	1813	±0.05	Floor, Upside-down, Angle	Wrist part IP67 Base part IP65	6	Standard

#### C Series

**«** 

High payload capacity and long reach. It is well suited for loading and unloading lathe/milling machines. With the additional application packages, it can meet the requirements of stamping, palletizing, polishing, welding, and cutting industries.



±0.2

2100

60

#### **K** Series

LA2100-60

**«** 

High-speed, High-precision, and high protection. Provide a variety of installation methods suitable for complex applications with high-precision requirements, such as handling, grinding, pick and place, welding and other industries.

Floor

IP54

6

Standard

Type K	Payload(kg)	Reach(mm)	Pos.rep(mm)	Mounting	Protection	Axes	Remark
LA1460-13	13	1460	±0.03	Floor, Upside-down	IP67	6	Standard
LA1725-20	20	1725	±0.04	Floor, Upside-down	Wrist part IP67 Base part IP65	6	Standard

LEANTEC INTELLIGENCE ROBOT INTRODUCTION 05/06

#### **H** Series



Collaborative six-axis robot, compact, lightweight, and high IP rating. Compliant with ISO 15066 collaborative safety standards, which ensures operator safety without the need for safety fences. It is ideal for applications, such as handling, assembly, and loading/unloading where human-robot collaboration is required.

Туре Н	Payload(kg)	Reach(mm)	Pos.rep(mm)	Mounting	Protection	Axes	Remark
LC800-5	5	800	±0.02	Floor, Upside-down, Angle	IP66	6	Standard
LC1000-10	10	1000	±0.03	Floor, Upside-down, Angle	IP66	6	Standard
LC1300-15	15	1300	±0.05	Floor, Upside-down, Angle	IP66	6	Standard

#### **Y Series**



High-precision, high-speed, lightweight, compact and small footprint design, suitable for occasions with high-precision requirements and small movement space, such as handling, palletizing, assembly, 3C and other industries.

Type Y	Payload(kg)	Reach(mm)	Р	os.rep(mm)		Mounting	Protection	Axes	Remark
			J1/J2(mm)	J3(mm)	J4(°)				
LS400-3	3	400	±0.01	±0.01	±0.01	Floor	IP20	4	Optional no electric cabinet
LS600-6	6	600	±0.02	±0.01	±0.01	Floor	IP54	4	Optional no electric cabinet
LS900-10	10	900	±0.02	±0.01	±0.01	Floor	IP20	4	Optional no electric cabinet



#### R Series 4KG

#### LA580-4H Hollow Wrist Type

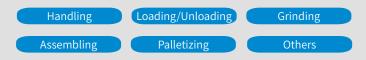


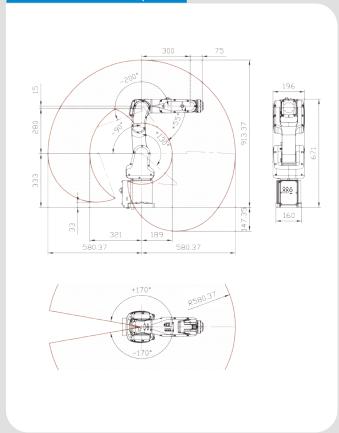


- High-speed and high-precision with ±0.02mm position repeatability
- Equipped with 16/16 I/O and is easily expandable for more complex applications
- Standard IP67 proved long term operation in harsh environment
- Equipped with 4 quick pneumatic connections and 8 I/O bus connections
- Wrist Model allows pneumatic connections and I/O sensor cables be installed from the base of the flange for easy cable management
- Provide 3 mounting methods: Floor, Upside-down, and Angle mount
- Compact and small footprint design. It's suitable for light payload operations and narrow workspace

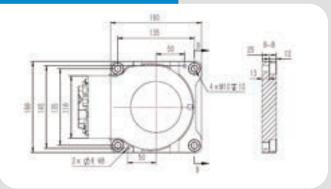


#### MAIN APPLICATIONS

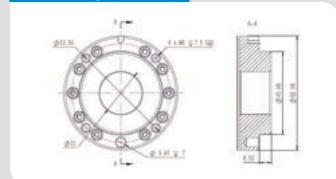




#### Robot Base Dimension



#### Robot Flange Dimension



No. Control Axes		6
Max. Payload (kg)		4
Max. Reach (mm)	580	
Pos.rep(mm)	±0.02	
	J1 Axis	±170
	J2 Axis	+130/-90
Motion Range (° )	J3 Axis	+55/-200
	J4 Axis	±170
	J5 Axis	±120
	J6 Axis	±360
	J1 Axis	450
	J2 Axis	337
Max. Speed* (°/s)	J3 Axis	300
	J4 Axis	610
	J5 Axis	550
	J6 Axis	823

		J1 Axis	0.4	
			0.2	
Motor Output (kw	·)	J3 Axis	0.1	
		J4 Axis	0.1	
			0.05	
		J6 Axis	0.1	
Weight (kg)		≈22		
Installation			Floor, Upside-down, Angle	
Levels of protection			IP67	
Ambient temperature / Humidity / Vibration			Ambient temperature: 0~45°C Ambient humidity:Normally 20-80 %RH or less (No dew. nor frost allow) Short term 90 %RH or less (within one month) Vibration acceleration:4.9 m/s (0.5G) or less	
Electronic Control Power Sup		upply	Single Phase 200-230VAC 50Hz/60Hz	
Box Specification	Size	Standard	480mm x 500mm x 280mm	
		Optional	330mm x 330mm x 90mm	



#### R Series 7KG

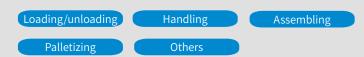
#### **LA707-7H Hollow Wrist Type**



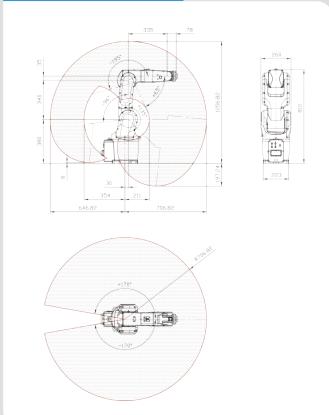
#### PRODUCT FEATURES

- High-speed and high-precision with ±0.02mm position repeatability
- Equipped with 16/24 I/O and is easily expandable for more complex applications
- Standard IP67 proved long term operation in harsh environment
- Equipped with 4 quick pneumatic connections and 8 I/O bus connections
- Hollow wrist type is selectable. It could let air pipeline and IO sensor wire internally routing from base to wrist frange, which could effectively enhance the gripper design wire winding
- Provide 3 mounting methods: Floor, Upside-down, and Angle mount
- Compact and small footprint design. It's suitable for light payload operations and narrow workspace

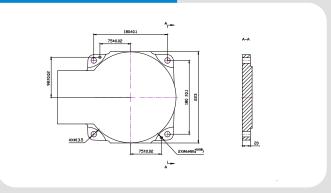




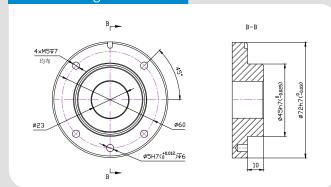




#### Robot Base Dimension



#### Robot Flange Dimension



No. Control Axes		6
Max Load Capacity		7
Max. Reach (mm)		707
Pos.rep(mm)		±0.02
	J1 Axis	±170
	J2 Axis	+135/-96
Motion Range (° )	J3 Axis	+65/-195
	J4 Axis	±170
	J5 Axis	±120
	J6 Axis	±360
	J1 Axis	440
	J2 Axis	355
Max. Speed* (°/s)	J3 Axis	440
	J4 Axis	480
	J5 Axis	450
	J6 Axis	900

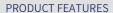
Ambient temperature / Humidity / Vibration			Normally 20-80%RH or less (No dew. nor frost allow) Short term 90 %RH or less (within	
Levels of protection			IP67  Ambient temperature: 0~45°C  Ambient humidity:	
Installation			Floor, Upside-down, Angle	
Weight (kg)			≈50	
		J6 Axis	0.1	
			0.1	
Motor Output (kw)		J3 Axis	0.4	
		J2 Axis	0.75	
		J1 Axis	0.75	



#### R Series 7KG

#### LA906-7 Long arm type





- High-speed and high-precision with ±0.02mm position repeatability
- Equipped with 16/24 I/O and is easily expandable for more complex applications
- Standard IP67 proved long term operation in harsh environment
- Equipped with 4 quick pneumatic connections and 8 I/O bus connections
- Hollow wrist type is selectable. It could let air pipeline and IO sensor wire internally routing from base to wrist frange, which could effectively enhance the gripper design wire winding
- Provide 3 mounting methods: Floor, Upside-down, and Angle mount
- Compact and small footprint design. It's suitable for light payload operations and narrow workspace



#### MAIN APPLICATIONS

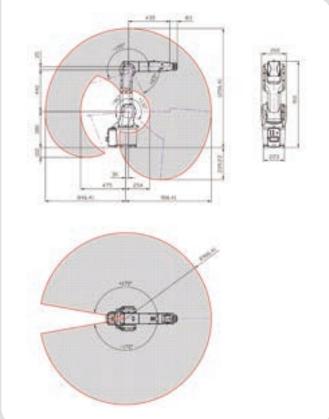
Loading/unloading

Handling

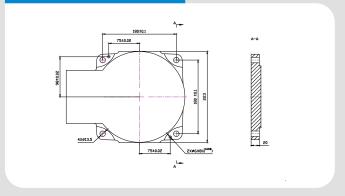
Assembling

Palletizing

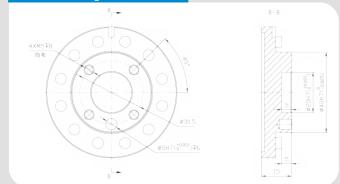
Others



#### Robot Base Dimension



#### Robot Flange Dimension



No. Control Axes		6
Max Load Capacity	7	
Max. Reach (mm)		906
Pos.rep(mm)		±0.03
	J1 Axis	±170
	J2 Axis	+130/-96
Motion Range (° )	J3 Axis	+65/-195
	J4 Axis	±170
	J5 Axis	±120
	J6 Axis	±360
	J1 Axis	355
	J2 Axis	355
Max. Speed* (°/s)	J3 Axis	355
	J4 Axis	480
	J5 Axis	450
	J6 Axis	705

		J1 Axis	0.75
		J2 Axis	0.75
		J3 Axis	0.4
Mata a Outra et (lee)		J4 Axis	0.2
Motor Output (kw)		J5 Axis	0.1
		J6 Axis	0.1
Weight (kg)		≈52	
Installation			Floor, Upside-down, Angle
Levels of protection			IP67
Ambient temperature / Humidity / Vibration			Ambient temperature: 0~45°C Ambient humidity: Normally 20-80%RH or less (No dew. nor frost allow) Short term 90 %RH or less (within one month) Vibration acceleration: 4.9 m/s (0.5G) or less
Electronic Control	Power S	Supply	Single Phase 200-230VAC 50Hz/60Hz
Box Specification	Size	Standard	480mm X 500mm X 280mm
	Size	Optional	330mm X 330mm X 90mm



#### R Series 10KG

#### LA1206-10



#### PRODUCT FEATURES

- $\hbox{\bf W} ider \, range \, of \, motion, \, high-speed \, and \, high-precision \, with \, \pm 0.05 mm \\ position \, repeatability$
- Equipped with 16/24 I/O and is easily expandable for more complex applications
- Equipped with 4 quick pneumatic connections and 8 I/O bus connections
- Provide 3 mounting methods: Floor, Upside-down, and Angle mount
- Compact and small footprint design. It's suitable for light payload operations and narrow workspace



#### MAIN APPLICATIONS



## Robot Base Dimension

# Robot Flange Dimension B-B 4xMSTB 4

No. Control Axes		6
Max Load Capacity	10	
Max. Reach (mm)	1206	
Pos.rep(mm)	±0.05	
	J1 Axis	±170
	J2 Axis	+125/-95
	J3 Axis	+65/-195
Motion Range (° )	J4 Axis	±170
	J5 Axis	±120
	J6 Axis	±360
	J1 Axis	297
	J2 Axis	223
	J3 Axis	220
Max. Speed* (°/s)	J4 Axis	480
	J5 Axis	360
	J6 Axis	705

		J1 Axis	1
		J2 Axis	1
		J3 Axis	0.4
Matan Outrout (local		J4 Axis	0.2
Motor Output (kw)		J5 Axis	0.1
		J6 Axis	0.1
Weight (kg)		≈76	
Installation			Floor, Upside-down, Angle
Levels of protection			IP54
Ambient temperatu Humidity / Vibratior		Ambient temperature: 0~45°C Ambient humidity: Normally 20-80%RH or less (No dew. nor frost allow) Short term 90 %RH or less (within one month) Vibration acceleration:	
			4.9 m/s (0.5G) or less
Electronic Control	Power S	upply	Single Phase 200-230VAC 50Hz/60Hz
Box Specification	Size	Standard	480mm X 500mm X 280mm
		Optional	330mm X 330mm X 90mm



#### R Series 25KG

#### LA1813-25



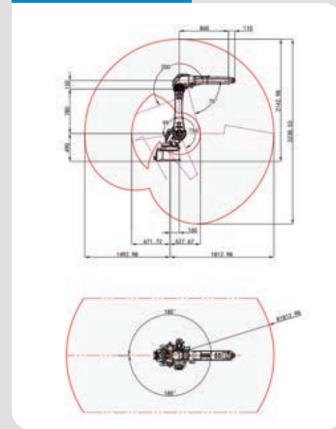
#### PRODUCT FEATURES

- High-speed and high-precision with ±0.05mm position repeatability
- Equipped with 16/24 I/O and is easily expandable for more complex applications
- Standard IP65 (wrist IP67) proved long term operation in harsh environment
- Equipped with 2 quick pneumatic connections and 24 I/O bus connections
- Provides 1~3 pneumatic valves suitable for grippers in handling and loading/unloading applications
- Provide 3 mounting methods: Floor, Upside-down, and Angle mount

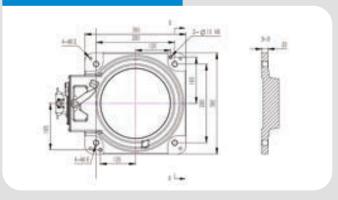


#### MAIN APPLICATIONS

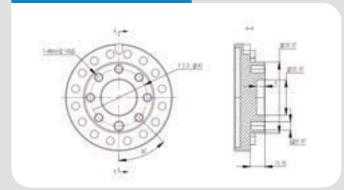




#### Robot Base Dimension



#### Robot Flange Dimension



No. Control Axes		6
Max Load Capacity		25
Max. Reach (mm)		1813
Pos.rep(mm)		±0.05
	J1 Axis	±180
	J2 Axis	+156/-99
	J3 Axis	+75/-200
Motion Range (° )	J4 Axis	±180
	J5 Axis	±135
	J6 Axis	±360
	J1 Axis	204
Max. Speed* (°/s)	J2 Axis	186
	J3 Axis	182
	J4 Axis	492
	J5 Axis	450
	J6 Axis	705

		J1 Axis	3
		J2 Axis	3
		J3 Axis	1.5
Mata a Outrout (loo)		J4 Axis	0.4
Motor Output (kw)		J5 Axis	0.4
		J6 Axis	0.4
Weight (kg)			≈256
Installation			Floor, Upside-down, Angle
Levels of protection		IP56(wrist:IP67)	
Ambient temperature / Humidity / Vibration		Ambient temperature: 0~45°C Ambient humidity: Normally 20-80%RH or less (No dew. nor frost allow) Short term 90 %RH or less (within one month) Vibration acceleration: 4.9 m/s (0.5G) or less	
Electronic Control	Power Su	pply	Three-phase 380VAC 50Hz/60Hz
Box Specification	Size		522mm x 408mm x 425mm



#### R Series 35KG

#### LA1813-35



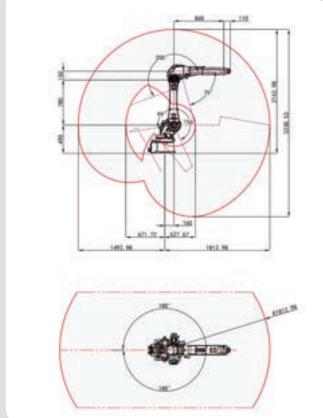
#### PRODUCT FEATURES

- High-speed and high-precision with ±0.05mm position repeatability
- Equipped with 16/24 I/O and is easily expandable for more complex applications
- Standard IP65 (wrist IP67) proved long term operation in harsh environment
- Equipped with 2 quick pneumatic connections and 24 I/O bus connections
- Provides 1~3 pneumatic valves suitable for grippers in handling and loading/unloading applications
- Provide 3 mounting methods: Floor, Upside-down, and Angle mount

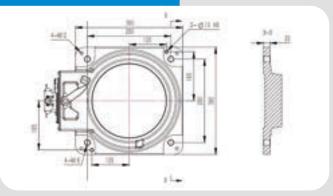


#### MAIN APPLICATIONS

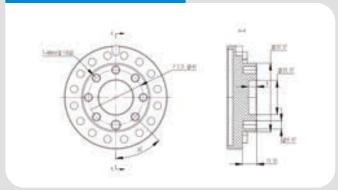




#### Robot Base Dimension



#### Robot Flange Dimension



No. Control Axes		6
Max Load Capacity		35
Max. Reach (mm)		1813
Pos.rep(mm)		±0.05
	J1 Axis	±180
	J2 Axis	+156/-99
	J3 Axis	+75/-200
Motion Range (° )	J4 Axis	±180
	J5 Axis	±135
	J6 Axis	±360
Max. Speed* (°/s)	J1 Axis	204
	J2 Axis	186
	J3 Axis	182
	J4 Axis	310
	J5 Axis	360
	J6 Axis	444

		J1 Axis	3
		J2 Axis	3
Motor Output (kw)		J3 Axis	1.5
		J4 Axis	0.4
		J5 Axis	0.4
		J6 Axis	0.4
Weight (kg)			≈256
Installation		Floor, Upside-down, Angle	
Levels of protection		IP56(wrist:IP67)	
Ambient temperature / Humidity / Vibration		Ambient temperature: 0~45°C Ambient humidity: Normally 20-80%RH or less (No dew. nor frost allow) Short term 90 %RH or less (within one month) Vibration acceleration: 4.9 m/s (0.5G) or less	
Electronic Control	Power S	Supply	Three-phase 380VAC 50Hz/60H
Box Specification Size			522mm x 408mm x 425mm



#### C Series 10KG

#### LA1468-10



#### PRODUCT CHARACTERISTICS

- Suitable for light and medium payload operations in wide range of applications
- Equipped with 16/24 I/O, 2 DA and 1 AD interface is easily expandable for more complex applications
- Equipped 12 I/O bus connections and 10mm air tube inside for easier cable management
- Provide 3 mounting methods: Floor, Upside-down and Angle mount

#### MAIN APPLICATIONS

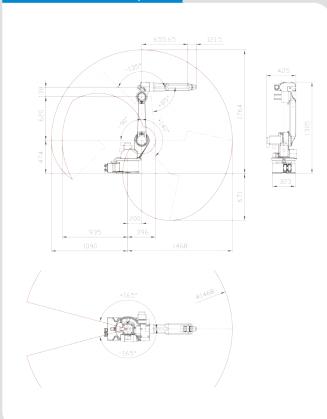
Loading/unloading

Welding

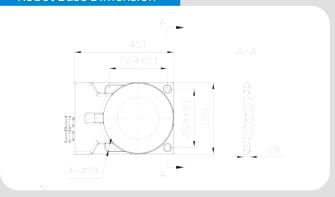
Others

Assembling

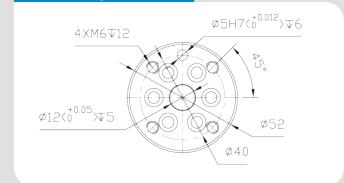




#### Robot Base Dimension



#### Robot Flange Dimension



No. Control Axes		6
Max Load Capacity		10
Max. Reach (mm)		1468
Pos.rep(mm)		±0.05
	J1 Axis	±165
	J2 Axis	+140/-90
M. I D (0.)	J3 Axis	+85/-135
Motion Range (° )	J4 Axis	±180
	J5 Axis	±129
	J6 Axis	±360
	J1 Axis	200
	J2 Axis	134
May Coad* (° /a)	J3 Axis	268
Max. Speed* (°/s)	J4 Axis	260
	J5 Axis	250
	J6 Axis	443

		J1 Axis	1.5
		J2 Axis	1.5
Motor Output (kw)		J3 Axis	0.75
Motor Output (kw)		J4 Axis	0.2
		J5 Axis	0.2
		J6 Axis	0.2
Weight (kg)			≈158
Installation		Floor, Upside-down, Angle	
Levels of protection		IP54	
Ambient temperature / Humidity / Vibration		Ambient temperature: 0~45°C Ambient humidity: Normally 75 %RH or less (No dew. nor frost allow) Short term 90 %RH or less (within one month) Vibration acceleration: 4.9 m/s (0.5G) or less	
Electronic Control	Power Su	pply	Single Phase 200-230VAC, 50Hz/60Hz
Box Specification	Size		580mm x 460mm x 870mm



#### C Series 20KG

#### LA1717-20



#### PRODUCT CHARACTERISTICS

- Suitable for light and medium payload operations in wide range of applications
- Equipped with 16/24 I/O, 2 DA and 1 AD interface is easily expandable for more complex applications
- Equipped 12 I/O bus connections and 10mm air tube inside for easier cable management
- Provide 3 mounting methods: Floor, Upside-down and Angle mount

#### MAIN APPLICATIONS

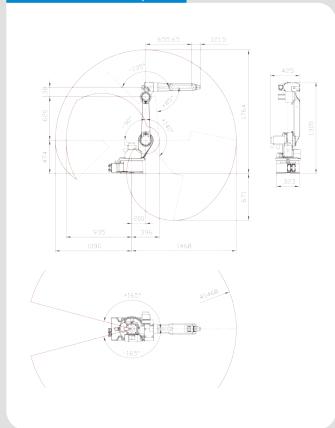
Loading/unloading

Welding

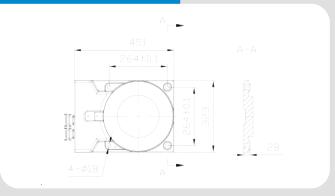
Others

Assembling

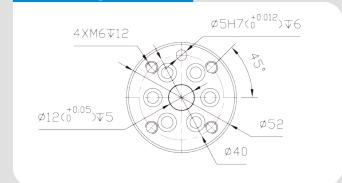




#### Robot Base Dimension



#### Robot Flange Dimension



No. Control Axes		6
Max Load Capacity		20
Max. Reach (mm)		1717
Pos.rep(mm)		±0.05
	J1 Axis	±160
	J2 Axis	+150/-100
	J3 Axis	+85/-160
Motion Range (° )	J4 Axis	±180
	J5 Axis	±130
	J6 Axis	±360
	J1 Axis	147
Max. Speed* (°/s)	J2 Axis	101
	J3 Axis	134
	J4 Axis	200
	J5 Axis	321
	J6 Axis	319

		J1 Axis	1.5
		J2 Axis	2
Motor Output (law)		J3 Axis	1.5
Motor Output (kw)		J4 Axis	0.4
		J5 Axis	0.2
		J6 Axis	0.2
Weight (kg)			≈270
Installation		Floor, Upside-down, Angle	
Levels of protection		IP54	
Ambient temperature / Humidity / Vibration		Ambient temperature: 0~45°C Ambient humidity: Normally 75 %RH or less (No dew. nor frost allow) Short term 90 %RH or less (within one month) Vibration acceleration: 4.9 m/s (0.5G) or less	
Electronic Control	Power Supply		Single Phase 200-230VAC, 50Hz/60Hz
Box Specification	Size		580mm x 460mm x 870mm



#### C Series 8KG

#### LA2000-8 Long arm type





#### PRODUCT CHARACTERISTICS

- Suitable for welding and loading/unloading light payload with extended reach design
- Equipped with 16/24 I/O, 2 DA and 1 AD interface is easily expandable for more complex applications
- Equipped 12 I/O bus connections and 10mm air tube inside for easy cable management
- Provide 3 mounting methods: Floor, Upside-down, and Angle mount

MAIN APPLICATIONS

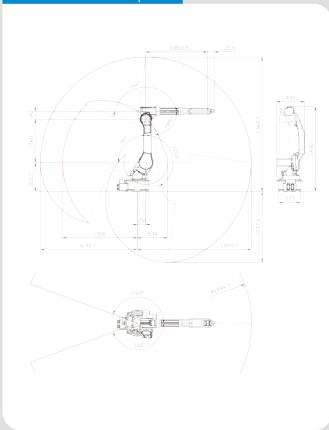
Loading/unloading

Handling

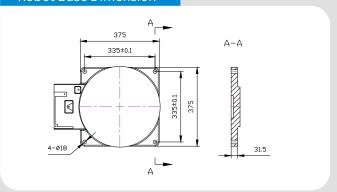
Welding

Assembling

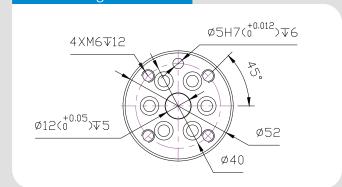
Others



#### Robot Base Dimension



#### Robot Flange Dimension



No. Control Axes		6
Max Load Capacity		8
Max. Reach (mm)		2000
Pos.rep(mm)		±0.05
	J1 Axis	±160
	J2 Axis	+150/-90
Motion Range (° )	J3 Axis	+85/-160
Motion Range ( )	J4 Axis	±180
	J5 Axis	±129
	J6 Axis	±360
	J1 Axis	147
	J2 Axis	101
Max. Speed* (°/s)	J3 Axis	134
	J4 Axis	200
	J5 Axis	250
	J6 Axis	443

		J1 Axis	1.5
		J2 Axis	2
Motor Output (kw	١	J3 Axis	1.5
Motor Output (kw	)	J4 Axis	0.4
		J5 Axis	0.2
		J6 Axis	0.2
Weight (kg)			≈270
Installation		Floor, Upside-down, Angle	
Levels of protection		IP54	
Ambient temperature / Humidity / Vibration		Ambient temperature: 0~45°C Ambient humidity: Normally 75 %RH or less (No dew. nor frost allow) Short term 90 %RH or less (within one month) Vibration acceleration: 4.9 m/s (0.5G) or less	
Electronic Control Power Supply		/	Single Phase, 200-230VAC, 50Hz/60Hz
Box Specification	Sox Specification Size		580mm×460mm×870mm



#### C Series 60KG

LA2100-60



#### PRODUCT CHARACTERISTICS

- Suitable for heavy payload, large workpiece with wide range of arm span
- Equipped with 16 I interfaces, 24 O interfaces, 2 DA and 1 AD interface, support quick expansion of IO board



MAIN APPLICATIONS

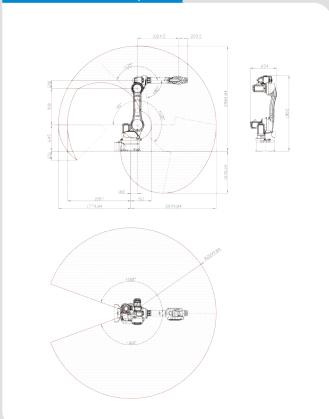
Loading/unloading

Handling

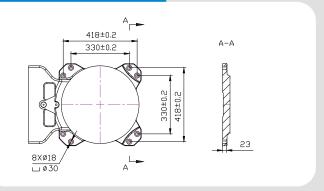
Grinding

Assembling

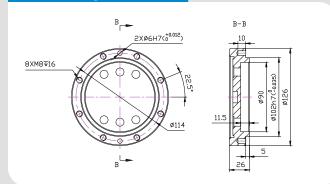
Others



#### Robot Base Dimension



#### Robot Flange Dimension



No. Control Axes		6
Max Load Capacity		60
Max. Reach (mm)		2100
Pos.rep(mm)		±0.2
	J1 Axis	±160
	J2 Axis	+135/-90
Motion Range (° )	J3 Axis	+82/-135
Motion Range ( )	J4 Axis	±180
	J5 Axis	+125/-105
	J6 Axis	±360
	J1 Axis	133
Max. Speed* (° /s)	J2 Axis	105
	J3 Axis	105
	J4 Axis	348
	J5 Axis	198
	J6 Axis	298

		J1 Axis	3
		J2 Axis	5.5
Motor Output (kw)		J3 Axis	3
motor output (m)		J4 Axis	1.5
		J5 Axis	0.75
		J6 Axis	0.75
Weight (kg)			≈780
Installation			Floor
Levels of protection		IP54	
Ambient temperature / Humidity / Vibration		Ambient temperature: 0~45°C Ambient humidity: Normally 75 %RH or less (No dew. nor frost allow) Short term 90 %RH or less (within one month) Vibration acceleration: 4.9 m/s (0.5G) or less	
Electronic Control	Power S	upply	Three Phase 380VAC 50Hz/60H
Box Specification	Size		600mm x 570mm x 970mm



#### K Series 13KG

LA1460-13



#### PRODUCT CHARACTERISTICS

- High-speed and high-precision with ±0.03mm position repeatability
- Compact machine and large arm range provide multiple installation methods
- Equipped with 16/24 I/O, 2 DA and 1 AD interface is easily expandable for more complex applications
- High IP rating of IP67 protection

#### MAIN APPLICATIONS

Loading/unloading

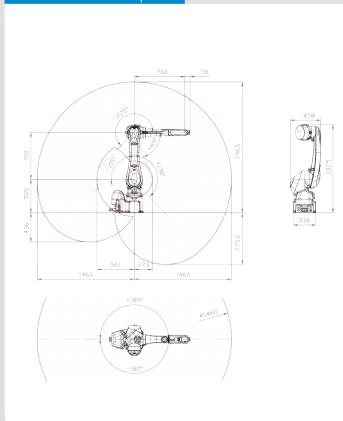
Handling

Grinding

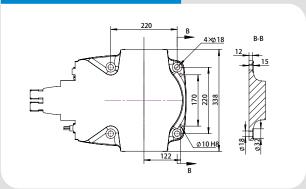
Assembling

Others

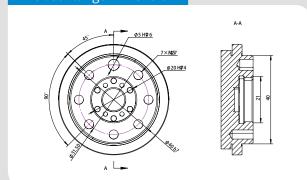




#### Robot Base Dimension



#### Robot Flange Dimension



No. Control Axes		6
Max Load Capacity		13
Max. Reach (mm)		1460
Pos.rep(mm)		±0.03
	J1 Axis	±180
	J2 Axis	+138/-105
Motion Range (° )	J3 Axis	+69/-225
	J4 Axis	±200
	J5 Axis	+125
	J6 Axis	±360
Max. Speed* (°/s)	J1 Axis	265
	J2 Axis	250
	J3 Axis	265
	J4 Axis	475
	J5 Axis	475
	J6 Axis	730

Motor Output (kw)		J1 Axis	1.5
		J2 Axis	1.5
		J3 Axis	0.75
		J4 Axis	0.2
		J5 Axis	0.2
		J6 Axis	0.2
Weight (kg)		≈170	
Installation		Floor, upside-down	
Levels of protection		IP67	
Ambient temperature / Humidity / Vibration		Ambient temperature: 0~45°C Ambient humidity: Normally 75 %RH or less (No dew. nor frost allow) Short term 90 %RH or less (within one month) Vibration acceleration: 4.9 m/s (0.5G) or less	
Box Specification	Power S	upply	Single Phase200-230VAC 50Hz/60Hz
	Size		580mm x 460mm x 870mm



#### K Series 20KG

LA1725-20



#### PRODUCT CHARACTERISTICS

- High-speed and high-precision with  $\pm 0.04$ mm position repeatability
- Compact machine and large arm range provide multiple installation methods
- Equipped with 16/24 I/O, 2 DA and 1 AD interface is easily expandable for more complex applications
- Basement IP65 protection with wrist to IP67 high protection

#### MAIN APPLICATIONS

Loading/unloading

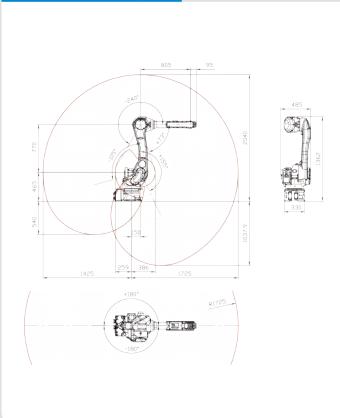
Handling

Grinding

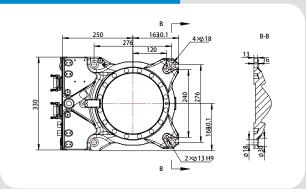
Assembling

Others

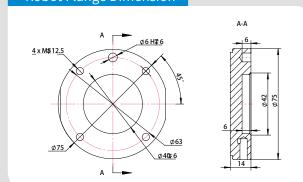




#### Robot Base Dimension



#### Robot Flange Dimension



No. Control Axes		6
Max Load Capacity		20
Max. Reach (mm)		1725
Pos.rep(mm)		±0.04
Making Day at 10 N	J1 Axis	±180
	J2 Axis	+155/-105
	J3 Axis	+73/-240
Motion Range (° )	J4 Axis	±270
	J5 Axis	+145
	J6 Axis	±360
Max. Speed* (°/s)	J1 Axis	190
	J2 Axis	205
	J3 Axis	210
	J4 Axis	400
	J5 Axis	360
	J6 Axis	610

		J1 Axis	2
		J2 Axis	2
Motor Output (kw)		J3 Axis	0.675
		J4 Axis	0.2
		J5 Axis	0.2
		J6 Axis	0.2
Weight (kg)		≈230	
Installation		Floor, Upside-down	
Levels of protection		Wrist part: IP67 Base part: IP65	
Ambient temperature / Humidity / Vibration		Ambient temperature: 0~45°C Ambient humidity: Normally 75 %RH or less (No dew. nor frost allow) Short term 90 %RH or less (within one month) Vibration acceleration: 4.9 m/s (0.5G) or less	
Electronic Control Box Specification	Power S	Supply	Single Phase 200-230VAC, 50Hz/60Hz
	Size		580mm x 460mm x 870mm



#### H Series Collaborative 5KG

#### LC800-5





#### PRODUCT CHARACTERISTICS

- Compliant with ISO 15066 collaborative safety standards
- Compact and lightweighted for easy transportation and assembling
- Supports hand guiding function for enhanced intuitive teaching
- Supports collision protection for human-machine collaboration safety without safety fence
- Equipped with 16/16 I/O, 2 DA, 2 AD, and safety inputs signal
- Standard IP66 proved long term operation in harsh environment
- Provide 3 mounting methods: Floor, Upside-down, and Angle mount

MAIN APPLICATIONS

Loading/unloading

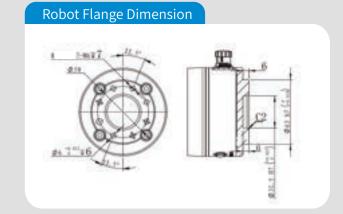
Handling

Assembling

Others

# Robot Work Envelope 185 226 105 177, 5

# 8-Ø9 107. 5 ± 0. 02



No. Control Axes		6
Max Load Capacity		5
Max. Reach (mm)		800
Pos.rep(mm)		±0.02
	J1 Axis	±360
Motion Range (° )	J2 Axis	±360
While the joints have a ±360° capability, this may be limited	J3 Axis	±360
by the application scenario, and each joint may not reach this capability. Please be mindful of this during actual use.	J4 Axis	±360
	J5 Axis	±360
	J6 Axis	±360
Max. Speed* (° /s)	J1 Axis	180
	J2 Axis	180
	J3 Axis	180
	J4 Axis	180
	J5 Axis	200
	J6 Axis	200

Weight (kg)		≈25
Installation		Floor, Upside-down, Angle
Levels of protection		IP66
Ambient temperature / Humidity / Vibration		Ambient temperature: 0~50°C Ambient humidity: Normally 75 %RH or less (No dew. nor frost allow) Short term 90 %RH or less (within one month) Vibration acceleration: 4.9 m/s (0.5G) or less
Electronic Control Box Specification	Power Supply	Single Phase200-230VAC, 50Hz/60Hz
	Size	445.2mm x 318.8mm x 536mm



#### H Series Collaborative 10KG

#### LC1000-10





#### PRODUCT CHARACTERISTICS

- Compliant with ISO 15066 collaborative safety standards
- Compact and lightweighted for easy transportation and assembling
- Supports hand guiding function for enhanced intuitive teaching
- Supports collision protection for human-machine collaboration safety without safety fence
- Equipped with 16/16 I/O, 2 DA, 2 AD, and safety inputs signal
- Standard IP66 proved long term operation in harsh environment
- Provide 3 mounting methods: Floor, Upside-down, and Angle mount

MAIN APPLICATIONS

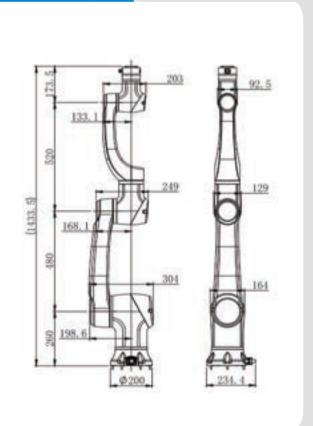
Loading/unloading

Handling

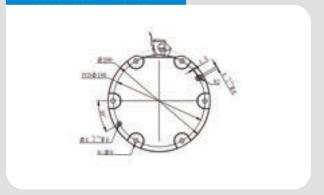
Assembling

Others

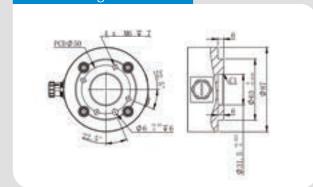
## Robot Work Envelope



## Robot Base Dimension



## Robot Flange Dimension



No. Control Axes		6
Max Load Capacity		10
Max. Reach (mm)		1000
Pos.rep(mm)		±0.03
	J1 Axis	±360
Motion Range (° )	J2 Axis	±360
While the joints have a ±360° capability, this may be limited	J3 Axis	±360
by the application scenario, and each joint may not reach this	J4 Axis	±360
capability. Please be mindful of this during actual use.	J5 Axis	±360
	J6 Axis	±360
	J1 Axis	100
	J2 Axis	100
Max. Speed* (° /s)	J3 Axis	150
Max. Speed (75)	J4 Axis	150
	J5 Axis	180
	J6 Axis	180

Weight (kg)		≈43	
Installation		Floor, Upside-down, Angle	
Levels of protection		IP66	
Ambient temperature / Humidity / Vibration		Ambient temperature: 0~50°C Ambient humidity: Normally 75 %RH or less (No dew. nor frost allow) Short term 90 %RH or less (within one month) Vibration acceleration: 4.9 m/s (0.5G) or less	
Electronic Control Box Specification	Power Supply	Single Phase 200-230VAC, 50Hz/60Hz	
	Size	445.2mm x 318.8mm x 536mm	



# H Series Collaborative 15KG

## LC1300-15



## PRODUCT CHARACTERISTICS

- Compliant with ISO 15066 collaborative safety standards
- Compact and lightweighted for easy transportation and assembling
- Supports hand guiding function for enhanced intuitive teaching
- Supports collision protection for human-machine collaboration safety without safety fence
- Equipped with 16/16 I/O, 2 DA, 2 AD, and safety inputs signal
- Standard IP66 proved long term operation in harsh environment
- Provide 3 mounting methods: Floor, Upside-down, and Angle mount



MAIN APPLICATIONS

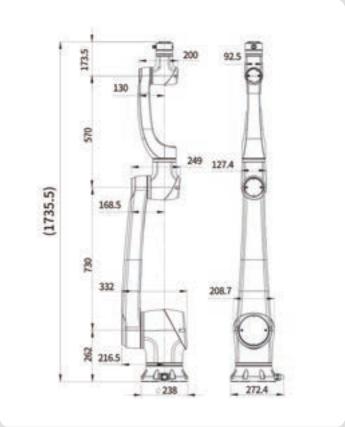
Loading/unloading

Handling

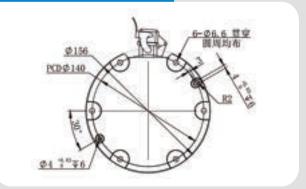
Assembling

Others

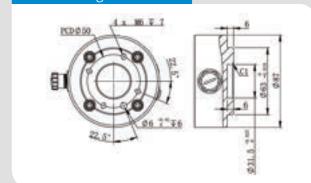
## Robot Work Envelope



## Robot Base Dimension



## Robot Flange Dimension



No. Control Axes		6
Max Load Capacity		15
Max. Reach (mm)		1300
Pos.rep(mm)		±0.05
	J1 Axis	±360
Motion Range (° )	J2 Axis	±360
While the joints have a ±360° capability, this may be limited	J3 Axis	±360
by the application scenario, and each joint may not reach this	J4 Axis	±360
capability. Please be mindful of this during actual use.	J5 Axis	±360
	J6 Axis	±360
	J1 Axis	80
	J2 Axis	80
Max. Speed* (°/s)	J3 Axis	120
	J4 Axis	120
	J5 Axis	150
	J6 Axis	150

Weight (kg)		≈60	
Installation		Floor, Upside-down, Angle	
Levels of protection		IP66	
Ambient temperature / Humidity / Vibration		Ambient temperature: 0~50°C Ambient humidity: Normally 75 %RH or less (No dew. nor frost allow) Short term 90 %RH or less (within one month) Vibration acceleration: 4.9 m/s (0.5G) or less	
Electronic Control	Power Supply	Single Phase 200-230VAC, 50Hz/60Hz	
Box Specification	Size	445.2mm x 318.8mm x 536mm	



# Y Series 4-axis 3KG

## LS400-3





#### PRODUCT FEATURES

- High-speed and high-precision with ±0.01mm position repeatability
- Compact and lightweight: Suitable for light and small loads and applications with limited movement space.
- Equipped with 16I/16O and is easily expandable for more complex applications
- Equipped 8 I/O bus connections and 2 pneumatic connections inside for easy cable management

#### MAIN APPLICATIONS

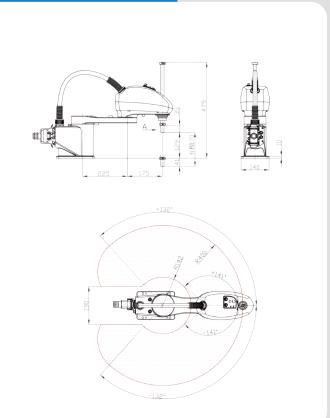
Handling

Asssembling

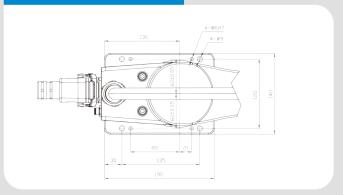
**Palletizing** 

Others

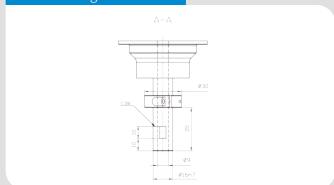
## Robot Work Envelop



## Robot Base Dimension



## Robot Flange Dimension



No. Control Axes			4
Max Load Capacity	Max Load Capacity		
Max. Reach (mm)			400
	J1Axis/ J2Axis	(mm)	±0.01
Pos.rep	J3 Axis	(mm)	±0.01
	J4 Axis	(°)	±0.01
Motion Range (° )	J1 Axis	(°)	±132
	J2 Axis	(°)	±141
	J3 Axis	(mm)	0/-170
	J4 Axis	(°)	±360
	J1 Axis	(°/s)	720
Max. Speed* (°/s)	J2 Axis	(°/s)	720
	J3 Axis	(mm/s)	1100
	J4 Axis	(°/s)	2500

		J1 Axis	0.4	
		J2 Axis	0.1	
Motor Output (kw)		J3 Axis	0.1	
		J4 Axis	0.1	
Weight (kg)			≈13	
Installation			Floor	
Levels of protection			IP20	
Ambient temperature / Humidity / Vibration		Ambient temperature: 0~45°C  Ambient humidity: Normally 75 %RH or less (No dew. nor frost allow)  Short term 90 %RH or less (within one month)  Vibration acceleration: 4.9 m/s (0.5G) or less		
Electronic Control	Power S	Supply	Single Phase 200-230VAC, 50Hz/60Hz	
Box Specification	Size		380mm x 510mm x 305mm	



# Y Series 4-axis 6KG

## LS600-6





#### PRODUCT FEATURES

- High-speed and high-precision with ±0.02mm position repeatability
- Compact and lightweight: Suitable for light and small loads and applications with limited movement space.
- Equipped with 16/16 I/O and is easily expandable for more complex applications
- Equipped 8 I/O bus connections and 2 pneumatic connections inside for easy cable management
- Standard option with IP54 high protection performance, suitable for complex working environment

#### MAIN APPLICATIONS

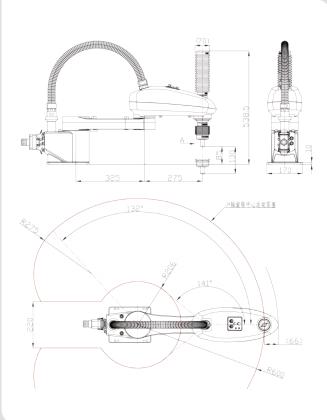
Handling

Asssembling

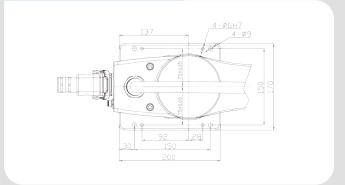
Palletizing

Otners

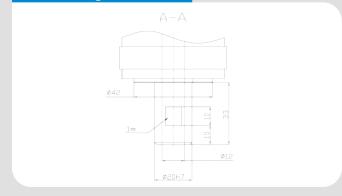
## Robot Work Envelop



## **Robot Base Dimension**



## Robot Flange Dimension



No. Control Axes			4
Max Load Capacity			6
Max. Reach (mm)			600
	J1Axis/ J2Axis	(mm)	±0.02
Pos.rep	J3 Axis	(mm)	±0.01
	J4 Axis	(°)	±0.01
	J1 Axis	(°)	±132
	J2 Axis	(°)	±141
Motion Range (° )	J3 Axis	(mm)	0/-130
	J4 Axis	(°)	±360
J1 Axis		(°/s)	450
	J2 Axis	(°/s)	720
Max. Speed* (°/s)	J3 Axis	(mm/s)	1100
J4 Axis		(°/s)	2000

	J1 Axis	0.4	
Motor Output (kw)	J2 Axis	0.2	
Motor Output (KW)	J3 Axis	0.1	
	J4 Axis	0.1	
Weight (kg)		≈17	
Installation		Floor	
Levels of protection		IP54	
Ambient temperature / Humidity / Vibration		Ambient temperature: 0~45°C Ambient humidity: Normally 75 %RH or less (No dew. nor frost allow) Short term 90 %RH or less (within one month) Vibration acceleration: 4.9 m/s (0.5G) or less	
Electronic Control	Power Supply	Single Phase 200-230VAC, 50Hz/60Hz	
Box Specification	Size	380mm x 510mm x 305mm	



# Y Series 4-axis 10KG

## LS900-10





#### PRODUCT FEATURES

- High-speed and high-precision with ±0.02mm position repeatability
- Compact and lightweight: Suitable for light and small loads and applications with limited movement space.
- Equipped with 16/16 I/O and is easily expandable for more complex applications
- Equipped 8 I/O bus connections and 2 pneumatic connections inside for easier cable management

## MAIN APPLICATIONS

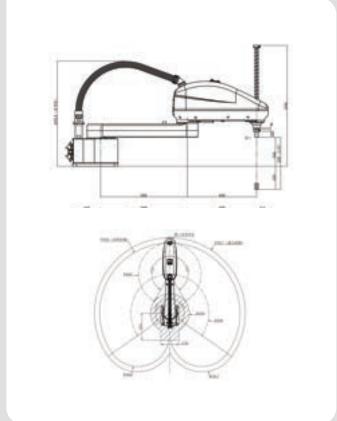
Handling

Asssembling

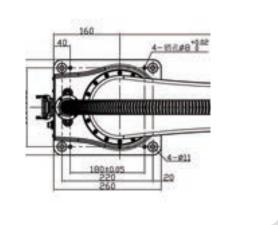
Palletizing

Others

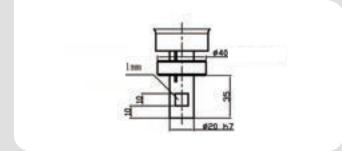
# Robot Work Envelop



## Robot Base Dimension



## Robot Flange Dimension



No. Control Axes			4
Max Load Capacity			10
Max. Reach (mm)			900
	J1Axis/ J2Axis	(mm)	±0.02
Pos.rep	J3 Axis	(mm)	±0.01
	J4 Axis	(°)	±0.01
Motion Range (° )	J1 Axis	(°)	±125
	J2 Axis	(°)	±150
	J3 Axis	(mm)	0/-300
	J4 Axis	(°)	±360
	J1 Axis	(°/s)	300
	J2 Axis	(°/s)	375
Max. Speed* (°/s)	J3 Axis	(mm/s)	1041
	J4 Axis	(°/s)	1500

		J1 Axis	0.75	
Motor Output (kw)		J2 Axis	0.4	
		J3 Axis	0.2	
		J4 Axis	0.2	
Weight (kg)			≈41	
Installation			Floor	
Levels of protection			IP20	
Ambient temperature / Humidity / Vibration		Ambient temperature: 0~45°C Ambient humidity: Normally 75 %RH or less (No dew. nor frost allow) Short term 90 %RH or less (within one month) Vibration acceleration: 4.9 m/s (0.5G) or less		
Electronic Control	Power S	Supply	Single Phase 200-230VAC, 50Hz/60Hz	
Box Specification Size			380mm x 510mm x 305mm	



# Flexible Robot Cell Products

# Double-layer trolley robot

LXC100-906R

LXC100-1206R

LXC11P-1468C

LXC11P-1717C





# Rotation trolley robot

LXC200-1206R





#### PRODUCT CHARACTERISTICS

- Enable rapid deploymentby flexible mobile design with lockable casters and fixed brackets
- Equipped with double-layer/rotation trolley control buttons and safety fence, ensuring safety during production
- Achieve robot-to-machine communication with just one Ethernet cable or IO connector
- Simply test communication signals and teach pick-and-place positions to save on-site setup time
- Swiftly reposition or change processing products according to production plans, meeting line change requirements seamlessly
- · Add new workpieces for processing without stopping the machine, enabling uninterrupted production cycles
- Compatible with an optional rotary table, LEANTEC product facilitates automatic flipping of workpieces for dual-end processing

MAIN APPLICATIONS

LEANTEC INTELLIGENCE ROBOT INTRODUCTION 43/44

# Double-layer trolley robot

#### PRODUCT PARAMETERS

Product type	LXC100-906R	LXC11P-1468C	LXC100-1206R	LXC11P-1717C
Coordinate robot type	LA906-6	LA1468-10	LA1206-10	LA1717-20
Payload(kg)	6	10	10	20
Reachmm)	906	1468	1206	1717
Pos.rep(mm)	±0.03	±0.05	±0.05	±0.05
Protection	IP67	IP54	IP54	IP54
Product size(mm)	1700×760	2400×850	1700×760	2400×850
Material tray size(mm)	570×420	800×600	570×420	800×600
Material tray maximum load(kg)	60	80	60	80
Suitable workpiece type	Medium/small type, angle location demand	Medium/small type, angle location demand	Medium/small type, angle location demand	Medium/big type, angle location demand
Suitable workpiece height(mm)	90	135	90	135
End effector	Optional	Optional	Optional	Optional

# Rotation trolley robot

Product type	LXC200-1206R
Coordinate robot type	LA1206-10
Robot maximum load(kg)	10
Robot working radius(mm)	1206
Repeat location precision(mm)	±0.05
Robot protection level	IP54
Product size(mm)	1950 X 800
Matching workpiece size(mm)	Outer circle 25-160
Material storehouse station amount	8
Material storehouse single station load(kg)	50
Single station height(mm)	410
Material station transmission	Chain transmission
End effector	Optional



# Cost reduction and efficiency enhancement

Compact modularization design achieves rapid and flexible deployment.



## 30 minutes

Rapid Deployment

## 10 minutes

Rapid Changeover



Timing Evaluation (	Deployment	Changeover
LEANTEC flexible robot cell products	30 mins	10 mins
Traditional robot pick and place	>12 hrs	>3 hrs

Optional multiple material storehouse modules could match different workpiece and equipment.

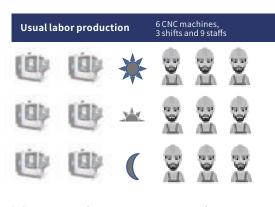
45/46



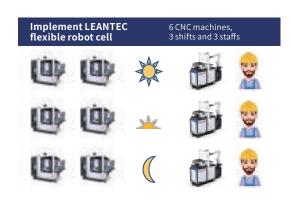




## Labor cost comparison



labor cost: about 150,000 USD/per year.



labor cost: about 50,000 USD/per year.

## Activation battle

**Common labor production** 

5 days, 8 hours per day



Implement LEANTEC Flexible robot cell production 7 days, 24 hours per day













# Handling Peripheral Devices



#### PRODUCT CHARACTERISTICS

- One-stop shop solution tailored for handling and loading/unloading applications
- Includes robot base, pipeline kits and end effectors
- Featuring a modular design, LEANTEC system allows flexible combinations across various specifications
- Options include dual and triple gripper configurations, equipped with a machine chuck chip blowing tube to meet machining tending requirements
- Pre-defined IO interface in both hardware and software ensures plug-and-play capability, significantly reducing implementation costs

MAIN APPLICATIONS

LEANTEC INTELLIGENCE ROBOT APPLICATIONS 47/48

## **End Effector**



Ready-to-use pneumatic gripper modules compatible with all six-axis robots. It offers options for dual and triple gripper configurations and includes pneumatic tubing for machine chuck chip blowing. Accelerate deployment into production lines with pipeline kits.



Туре	Compatible robot	Spec.	Bore size (mm)	Opening/Closing stroke(mm)	Gripping force (N)
MD10-20A-705	All six-axis robots	2 Airtec grippers, 1 blowing tube	32	4	Close 74, Open 82
MD20-20A-705	All six-axis robots	2 Chelic grippers, 1 blowing tube	32	4	Close 62, Open 65
MD26-20C-605	All six-axis robots	2 Chelic grippers, 1 blowing tube	63	8	Close 399, Open 412
MD10-32A-315	All six-axis robots	3 Airtec grippers, 1 blowing tube	32	4	Close 74, Open 82

# Pipeline Kit

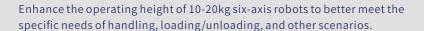


Ready-to-use pipeline kits, compatible with C-Series 10kg and 20kg six-axis robots. The junction box includes 1-3 sets of solenoid valves for grippers, and 1 for machine chuck chip blowing. Facilitate rapid integration into production lines with the addition of end effectors.



Туре	Compatible robot	Spec.	Junction box size(mm)	Valve spec.
GX31-6YC	LA1468-10, LA1717-20	Bellows, Junction box, IO wires, Tubes, Brackets	280*190*130	3 for grippers, 1 for blowing
GX21-6YC	LA1468-10, LA1717-20	Bellows, Junction box, IO wires, Tubes, Brackets	280*190*130	2for grippers, 1 for blowing
GX11-6YC	LA1468-10, LA1717-20	Bellows, Junction box、IO wires, Tubes, Brackets	280*190*130	1 for grippers, 1 for blowing

## **Robot Base**





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7

Туре	Compatible robot	Product dimensions (mm)	Product weight (kg)	Installation method
DZG-H300-B	LA1468-10, LA1717-20, LA1460-13, LA1725-20	500(Width), 300(Height)	54	Floor
DZG-H500-B	LA1468-10, LA1717-20, LA1460-13, LA1725-20	500(Width), 300(Height)	67	Floor

# Rotary Table



Ready-to-use rotary table for loading/unloading applications. In one-to-two or one-to-many machine tending processes, the table automatically rotates workpieces for machining on both ends. It can be seamlessly integrated into production lines and compatible with Robot Cell.



Model	Compatible workpiece	Spec.	Bore size (mm)	Opening/Closingstroke (mm)	Gripping force (N)
FZY-X5B5-GY	Weight <1kg,Height customizable	1 Airtec gripper and rotary valve	50	6	Close 187, Open 204



# Welding Robot Products

# C Series 6KG

AWA35(P)Q-1600C AWA50Q-1600C



# e arm

## PRODUCT CHARACTERISTICS

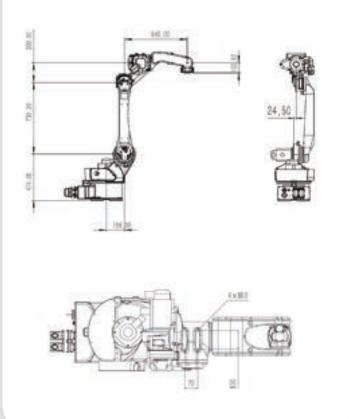
- Light payload with a spacious working area
- Hollow design allows internal routing of welding lines within the arm body, minimizing interference
- Equipped with 16/24 I/O, 2 DA, 1 AD, and is easily expandable for more complex applications
- Provide 3 mounting methods: Floor, Upside-down, and Angle mount
- Compact body design suitable for welding applications

MAIN APPLICATIONS

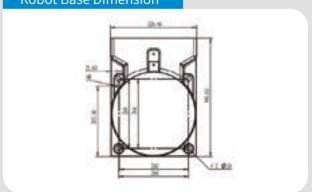
Welding

LEANTEC INTELLIGENCE ROBOT APPLICATIONS 49/50

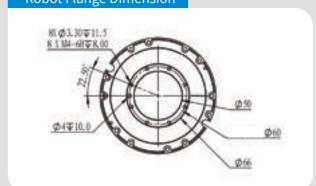
# Robot Work Envelope



## Robot Base Dimension



## Robot Flange Dimension



No. Control Axes		6
Max Load Capacity		6
Max. Reach (mm)		1600
Pos.rep(mm)		±0.05
	J1 Axis	±170
	J2 Axis	+140/-90
Motion Range (° )	J3 Axis	+85/-135
	J4 Axis	±180
	J5 Axis	±120
	J6 Axis	±350
	J1 Axis	148
	J2 Axis	148
Max. Speed* (°/s)	J3 Axis	247
	J4 Axis	385
	J5 Axis	444
	J6 Axis	790

		J1 Axis	1.5	
		J2 Axis	1.5	
Motor Output (kw)		J3 Axis	0.75	
		J4 Axis	0.2	
		J5 Axis	0.2	
		J6 Axis	0.2	
Weight (kg)		≈200		
Installation	Illation		Floor, Upside-down, Angle	
Levels of protection			IP54	
Ambient temperature / Humidity / Vibration			Ambient temperature: 0~40°C Ambient humidity: Normally 75%RH or less (No dew. nor frost allow) Short term 90 %RH or less (within one month) Vibration acceleration: 4.9 m/s2 (0.5G) or less	
Electronic Control	Power	Supply	Single Phase 200-230VAC 50Hz/60Hz	
Box Specification	Size		580×460×870mm	



# Welding Robot Products

# C Series 6KG

AWA35(P)Q-2000C Long arm type AWA50Q-2000C Long arm type





## PRODUCT CHARACTERISTICS

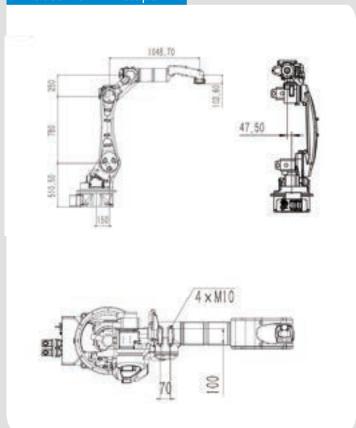
- Light payload with a spacious working area
- Hollow design allows internal routing of welding lines within the arm body, minimizing interference
- Equipped with 16/24 I/O, 2 DA, 1 AD, and is easily expandable for more complex applications
- Provide 3 mounting methods: Floor, Upside-down, and Angle mount
- Compact body design suitable for welding applications

MAIN APPLICATIONS

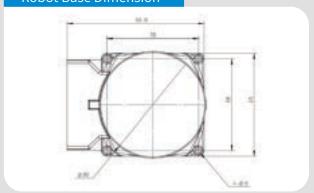
Welding

LEANTEC INTELLIGENCE ROBOT APPLICATIONS 51/52

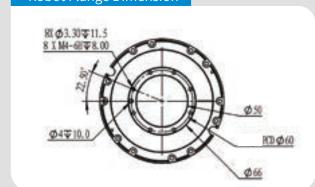
## Robot Work Envelope



## Robot Base Dimension



## Robot Flange Dimension



No. Control Axes		6
Max Load Capacity		6
Max. Reach (mm)		2000
Pos.rep(mm)		±0.05
	J1 Axis	±170
	J2 Axis	+150/-100
Motion Range (° )	J3 Axis	+85/-135
	J4 Axis	±180
	J5 Axis	±130
	J6 Axis	±350
	J1 Axis	148
	J2 Axis	148
Max. Speed* (°/s)	J3 Axis	247
	J4 Axis	385
	J5 Axis	444
	J6 Axis	790

Box Specification	Size		580×460×870mm	
Electronic Control	Power	Supply	Single Phase 200-230VAC 50Hz/60Hz	
Ambient temperature / Humidity / Vibration	,		Ambient temperature: 0~40°C Ambient humidity: Normally 75%RH or less (No dew. nor frost allow) Short term 90 %RH or less (within one month) Vibration acceleration: 4.9 m/s2 (0.5G) or less	
Levels of protection			IP54	
Installation			Floor, Upside-down, Angle	
Weight (kg)			≈323	
		J5 Axis J6 Axis	0.2	
		J4 Axis	0.4	
Motor Output (kw)	J3 Axis		1.5	
	J2 Axis		2	
		J1 Axis	1.5	



# Welding Robot Products

# Welding Machine









**Low Spatter** 



Stable Wire Feeding



**Built-in Database** 



Digital Control Save & Restore





**User Friendly** 

Product Model	35Q	50Q	35PQ
Rated Input Voltage/Frequency (V/Hz)	3 phase, 380±20%/50	3 phase, 380±20%/50	3 phase, 380±20%/50
Rated Input Capacity (KVA)	14	25	14
Rated Input Current (A)	21	38	28
Rated Output Voltage(V)	31.5	39	31.5
Duty Cycle (%)	60	100	60
OCV (V)	72	73	90
Output Current/Voltage Range (A)	60A/17V~350A/35V	60A/17V~5000A/42V	60A/17V~350A/31.5V
Wire Size (mm)	0.8, 1.0, 1.2, 1.6	0.8, 1.0, 1.2, 1.6	0.8, 1.0, 1.2
Gas Flow (L/Min)	15~20	15~20	15~20
Cooling Method	Air Cooling	Air /Water Cooling	Air Cooling
Protection Class	IP23	IP23	IP23
Insulation Class	Н	Н	Н
Dimension (mm)	660x320x560	660x320x560	660x320x560
Weight (kg)	50	55	60

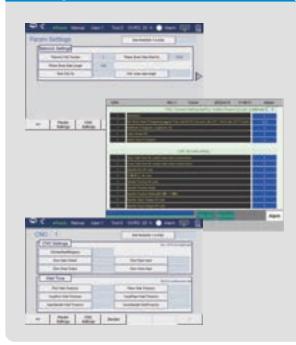
EANTEC INTELLIGENCE ROBOT APPLICATIONS 53/54



# **Robot Applications**

## Lathe & machining pick and place

## CNC Quick Connection Process Package



- Fast Communication: Network cable connection with parameter setup allows for quick online connectivity.
- Reduced Wiring: Minimizes the use of physical communication cables, saving costs and simplifying troubleshooting.
- Easy to Learn: Standard software package included, lowering the threshold for adjustment.
- Convenient Maintenance: Standardized processes make teaching easier and maintenance more convenient.









LEANTEC INTELLIGENCE ROBOT APPLICATIONS 55/56

## Tool grinder pick and place

## Grinder Pick and Place Process Package





- Easy Operation: Calibrate the collet end pick and place position, and change parameters for collet parametric material replacement.
- Smooth Process: Supports multi-segment loading and unloading to prevent material jams.
- Compatible Grippers: Parametric pick and place for pallets, compatible with both single and dual-opening grippers.
- Reduced Recalibration: Teach once during setup; no need for point correction after changing pallets.
- Multi-Scenario Adaptation: Freely set the pick direction and clearance distance to meet various usage scenarios









# **Robot Applications**

## **Robot Welding**

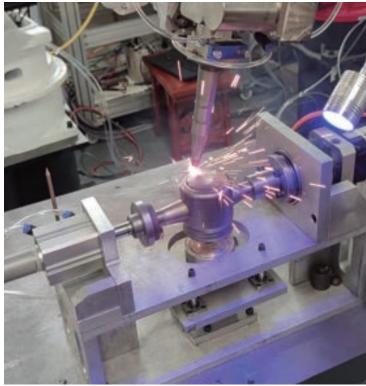
## Arc Welding and Laser Welding Process Package





- Complete Software Package: Comprehensive welding instructions, including weaving welding and intermittent welding, to meet various process requirements.
- Fast Tuning:s: Process software support for file saving, facilitating easy process retrieval and transfer.
- Dedicated Process Software: Standard laser welding dedicated process software package.
- Precise Control: Supports time, power, and speed laser functions for precise control of laser power during both start and end phases, preventing over-welding issues.

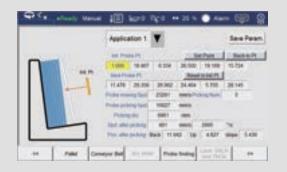




LEANTEC INTELLIGENCE ROBOT APPLICATIONS 57/58

## Woodworking & Glass Industry Pick and Place

## Material pick and place process package



- Complete Process: The process package includes material probing and picking, edge-finding, and placement.
- Fast Tuning: Process software files can be saved by group number, facilitating easy process invocation and duplication.
- Reduced Recalibration: No need to recalibrate when changing material warehouses; only one point teaching for different workpiec sizes.
- Multi-Workpiece Adaptation: Meets the process requirements for different sizes and models.









# **Robot Applications**

## Flexible robot cell pick and place solution

## Solution Description

Applicable Scenario: Machine tool pick and place applications in the metalworking industry

**Automatic element:** articulated robot, automatic storehouse, end side actuator, reverse mechanism, remote tool conversations, cloud system, etc.

- Automation Elements: Articulated robot, automatic material warehouse, end effector, flip table mechanism, remote tool holder, cloud system, etc.
  - Rapid Deployment: The trolley product features a flexible mobile design, equipped with casters and fixed brackets, enabling quick deployment.
- Fast Communication: Only one network cable or IO plug connector is needed to achieve communication between the device and the machine tool.
- Quick Tuning: During commissioning, simply test communication signals and teach pick and place points, saving on-site debugging time and quickly starting production.
  - Fast Line Change: According to the production plan, workstations can be quickly relocated or processing products changed to meet line change production needs.
- Non-stop Production: New workpieces can be added for processing without stopping the robot and machine tool, achieving continuous production.
- Software Features: Equipped with a torque limitation function, providing a quick-connect process package and remote tool compensation function for SYNTEC machine tool systems.









LEANTEC INTELLIGENCE ROBOT APPLICATIONS 59/60

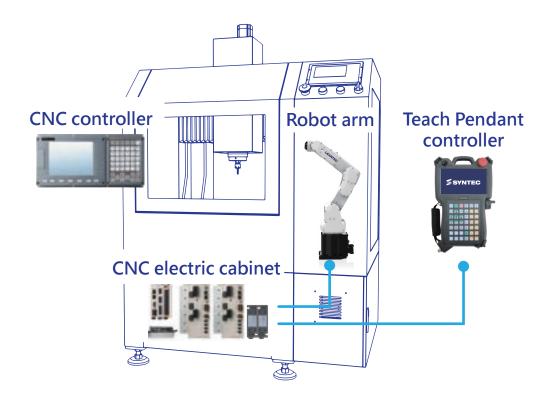
## **Electrical Cabinet-Free Solution**

## **Solution Description**

#### Models:

Y series:LS400-3、LS600-4、LS900-10 R series:LA580-4H、LA707-7H、LA906-7、LA1206-10

- Wide Range: Various robot with extensive reach to meet customized needs.
- Cost Reduction: Eliminates the need for robot control cabinets and some electrical components, reducing procurement and maintenance costs.
- Quick Connection: Supports fast connections with multiple CNC controller brands, eliminating the complex IO wiring process.
- Simplified Structure: Comes standard with robot, with robotelectrical controls integrated into the machine tool's electrical cabinet and pre-installed.
- Comprehensive Service System: A complete customer service system offering one-stop solutions and services, lowering the entry barrier for customers.





# **Robot Controller**

## Teach Pendant Controller

Specifications		
CHT / CHS/ EN		
Standard 4-axis (expandable to 12-axis)		
Touch screen, button operation		
4GB, Unlimited number of programs		
M3 bus, EtherCAT bus		
USB*1		
Control panel, Emergency stop,		
Mode selector switch, Safety switch, Handwheel		
10 meters		
IP65		
-10°C~50°C		
-20%~90% RH, non-condensing		
340 x 207 x 78		



## H Series Robot Control Cabinet

Item	H1 control cabinet	H2 control cabinet	
Compatible robot model	LC800-5、LC1000-10	LC1300-15	
Input power supply	1PH, 200V~240V, 50/60Hz		
Rated current at full load (A)	2.5		
Input/Output	16I, 16O, 2DA, 2AD Safety dedicated input contact		
Communication interface	Ethernet×1(10/100Mbps)		
Dimensions (mm)	445.2 x 318.8 x 536		
Weight (kg)	18.5		







LEANTEC INTELLIGENCE ROBOT CONTROLLER 61/62









# R, C, K Series Robot Control Cabinet

Item	BS20 Control box	R1 Control cabinet	CM10 Control cabinet	DM21 Control cabinet
Compatible robot	LA580-4H		LA1468-10	LA1813-25
model	LA707-7H		LA1717-20	LA1813-35
	LA906	ŝ-7	LA2000-8	
	LA1206-10		LA1460-13	
			LA1725-20	
			AWA-1600C (welding)	
			AWA-2000C (welding)	
Input power supply	1PH, 200V~230V, 50/60Hz		3PH, 380V, 50/60Hz	
Rated current at full load (A)	15	20	25	17.5
Input/Output	161, 160,	161, 160,	161, 240,	161,240,
	2DA, 1AD, 1PWM		2DA, 1AD, 1PWM	2DA, 1AD, 1PWM
	Safety dedicated input Manual brake release input			
Communication	EtherCAT×1	Ethernet×1 (10/100Mbps)		
interface	Ethernet×1 (10/100Mbps)			
	SRI×1 (length limit of 15m)			
Dimensions (mm)	330 x 330 x 90	480 x 500 x 280	580 x 460 x 870	522 x 408 x 425
Weight (kg)	7	27	70	35
Remarks			Expandable with 1 additional driver Expandable with 4 pieces of 16I or 160 modules	Expandable with 2 pieces of 161 o 160 modules



# System Functions

## Intuitive operation and programming

• Conversational programming, no need to learn robot languages



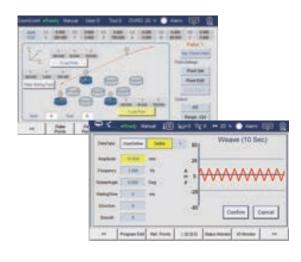
## Sufficient IO commands

- Provide complete IO commands without writing any PLC on your own.
- Wait for Point I without deceleration, and output Point O during movement, which can improve the operating efficiency of the machine.



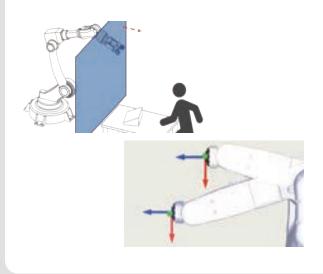
## Quick implementation into practical applications

- Provide the batching tray and track tracking and workstation reservation functions
- Provide various process packages, such as welding, picking and placing, etc
- Record important points according to reference points and reuse them in the program



## Easy advanced programming function

- The anti-collision area function can prevent the arm from entering a specific area to increase safety
- The dynamic anti-collision function can prevent the arm from colliding during movement
- Able to automatically pass the singular point without writing any bypassing program on your own



63/64

# **Visual Solution**

## **Product Characteristics**

- Support Modbus-TCP、EtherNet/IP communication could work with several market available visual camera use.
- Support SYNTEC visual and and others well-known brands.
- Operates through R value/IO/programming.
- It could connected to IP CAM and displayed on the controller
- to meet monitoring requirements.



# Measuring & Testing Solution

## **Product Characteristics**

- Support multiple-axis synchronous motion for larger measurement Generate measurement log for long-term monitoring.
- Easy setup for common industrial communications. (Modbus-TCP, EtherNet/IP, etc.)
- Simple integration with other commercial vision systems.
- Upload data through the Internet in real time for tool compensation and remote monitoring.



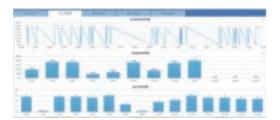


# **LEANTEC Cloud Product**

## Workshop management



· Real time monitor of equipment status



 Single machine feed rate, utilization, productivity at a glance

## Processing record form



• The number of jobs reported can also be presented on the board by filtering the criteria.

## **Document delivery**



 The machining process can be dispatched online to CNC.







 Single machine information could be more transparent



· Check the efficiency of equipments at any time

## Abnormal notification



 The abnormal information is alerted to the responsible personnel in time to prevent the machine from prolonged alarm and delay production.

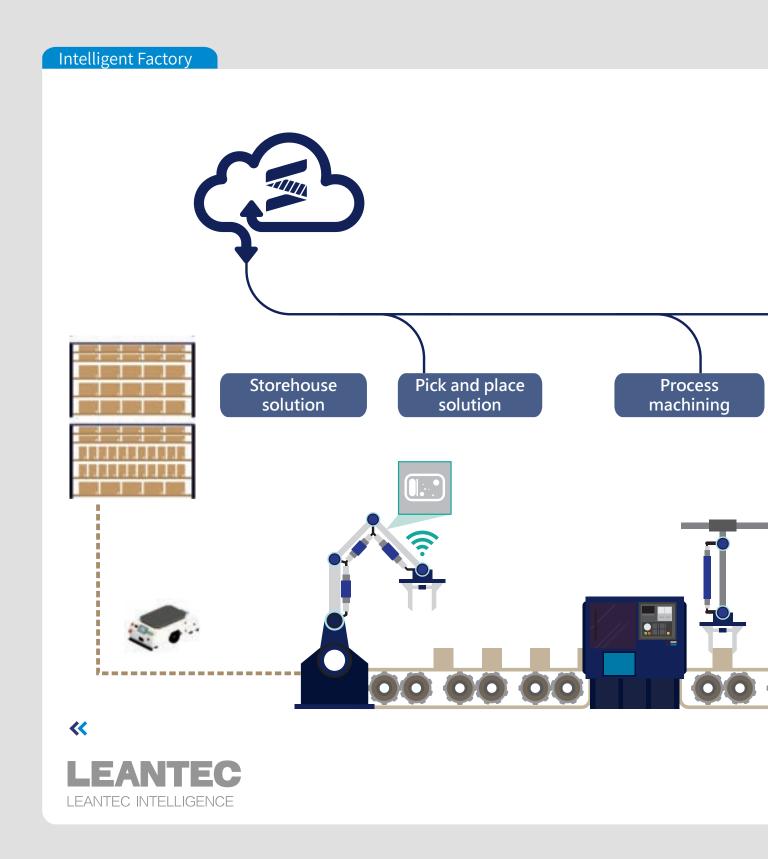
## Visualizing workshop data



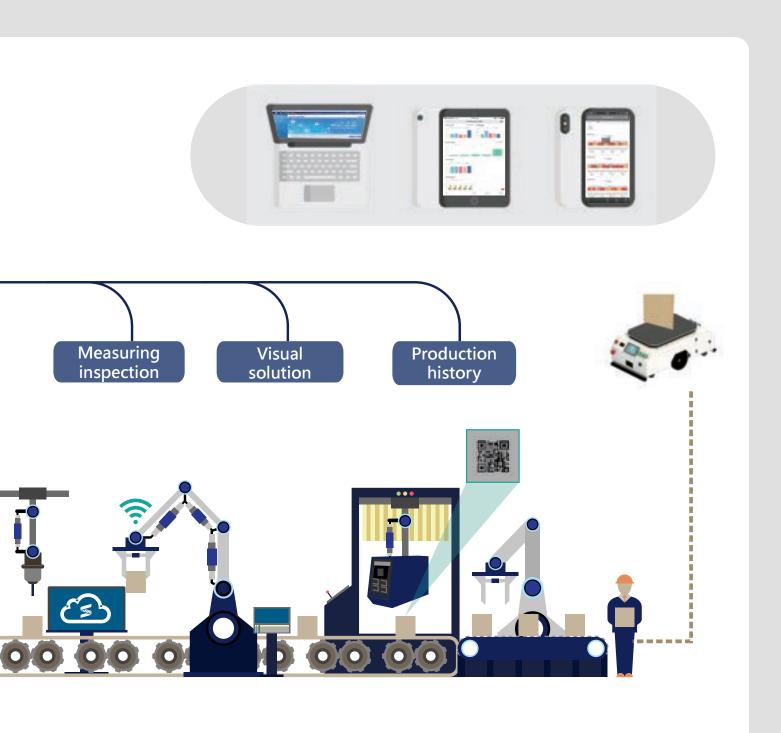
 Multiple large-screen kiosks are presented in rotation to visualize the data in workshop. EANTEC INTELLIGENCE MODULAR PLATFORM 65/66



# Intelligent Factory



LEANTEC INTELLIGENCE MODULAR PLATFORM 65/66



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