

### **ESTUN Robotics Europe AG**







Linkedin

# ESTUN





# **ESTUN INDUSTRIAL ROBOTS**

Close to the Scene For Deep Understanding of Various Complex Processes

ESTUN has always adhered to the strategy of "ALL Made by ESTUN", insisted on system-level forward R&D, with a self-sufficiency rate of over 95% for core robot components. ESTUN boasts a full range of 76 industrial robot products covering loads from 3 to 700kg. In the Chinese market, ESTUN has consistently ranked as the top domestic brand in robot shipments for many years. ESTUN collaborates with leading brands in automotive, photovoltaic, lithium battery, metal processing, electronics manufacturing, building materials and home furnishings, logistics packaging, food & beverage, rail transportation, construction machinery, special vehicles, shipbuilding and marine engineering, and aerospace industries to create benchmark smart manufacturing production lines and factories.

**ESTUN INDUSTRIAL ROBOTS** 

Nanjing ESTUN Automation Co., Ltd., established in 1993, went public on the Shenzhen Stock Exchange in 2015 (stock code: 002747). ESTUN Automation has always adhered to its mission of "Automation for Everyone" and strives to achieve social value of "For a better life". The Company operates three core businesses: automation core components and motion control systems, industrial robots and intelligent manufacturing systems, and digital products and services.

With independent core technologies and excellent products and services, ESTUN Automation has become a leading enterprise in the domestic automation industry and a leading player in the domestic robot industry. Guided by the business philosophy of "Openness, Innovation and Co-growth", the Company works hand in hand with partners to promote the rapid development of China's intelligent and digital industries.

ESTUN Automation has established multiple subsidiaries and manufacturing bases nationwide and owns several wholly-owned or controlling companies overseas, including Trio in the United Kingdom, Cloos and M.A.i. in Germany. The Company has international competitive advantages in automation core components and motion control solutions, industrial robots and intelligent manufacturing solutions, welding robots and intelligent welding solutions.

In the future, ESTUN Automation will join forces with its partners to build a grand blueprint for the intelligent manufacturing industry. With the goal of becoming the leading brand in motion control systems domestically and creating a world-renowned brand for Chinese robots, ESTUN aims to become an internationally respected and globalized enterprise.

A better world deserves our utmost dedication.

Ether CAT. CE ISO























ER3-	400	)-SR
SCARA Se	ries Indus	trial Robot

ER3-500-SR SCARA Series Industrial Robot

ER4-550-SR-U SCARA Series Industrial Robot

ER4-650-SR-U SCARA Series Industrial Robot

ER6-500-SR

SCARA Series Industrial Robot

ER6-600-SR

SCARA Series Industrial Robot

ER6-700-SR SCARA Series Industrial Robot

ER10-500-SR SCARA Series Industrial Robot

ER10-600-SR SCARA Series Industrial Robot

ER10-700-SR SCARA Series Industrial Robot

Number of Axes	4	4	4	4	4
Max. Load	3kg	3kg	4kg	4kg	6kg
Reach of Arm	400mm	500mm	500mm 550mm		500mm
Repeatability	J1+J2:±0.02mm J3:±0.01mm ; J4:±0.01°	J1+J2:±0.02mm J3:±0.01mm; J4:±0.01°	J1+J2:±0.025mm J1+J2:±0.025mm J3:±0.015mm ; J4:±0.05° J3:±0.01mm ; J4:±0.01°		J1+J2:±0.02mm J3:±0.01mm; J4:±0.01°
Body Weight	13kg	3kg 14kg		18kg	18kg
IP Grade	IP20 IP20		IP20	IP20	IP20
Installation	Floor	Floor Floor Floor		Floor	
Certifications Supported	CE、KCS	CE、KCS	CE、KCS	CE′ KCS	CE、KCS

	1-Axis	±132°	1-Axis	±132°	1-Axis	±200	1-Axis	±200	1-Axis	±132°
lange	2-Axis	±141°	2-Axis	±141°	2-Axis	±200	2-Axis	±200	2-Axis	±150°
Motion Range	3-Axis	0~150mm	3-Axis	0~150mm	3-Axis	0~150mm	3-Axis	0~150mm	3-Axis	0~200mm
	4-Axis	±360°								

	1-Axis 720°/s	Resultant velocity	1-Axis <b>720</b> °/s	Resultant velocity	1轴 405°/s	Resultant velocity	1-Axis 405°/s	Resultant velocity	1轴 450°/s	Resultant velocity
elocity	2-Axis <b>720</b> °/s	7225mm/s	2-Axis <b>720</b> °/s	8480mm/s	2轴 705°/s	7271mm/s	2-Axis 705°/s	8593mm/s	2轴 720°/s	7050mm/s
Max. Velocity	3-Axis 1	280mm/s	3-Axis 12	280mm/s	3轴 1	120mm/s	3-Axis 11	120mm/s	3轴 1	130mm/s
	4-Axis	3000° /s	4-Axis 3	000° /s	4轴 2	2800°/s	4-Axis 2	2800° /s	4轴 2	2300° /s

4	4	4	4	4
6kg	6kg	10kg	10kg	10kg
600mm	700mm	500mm	600mm	700mm
J1+J2:±0.02mm J3:±0.01mm ; J4:±0.01°	J1+J2:±0.02mm J3:±0.01mm; J4:±0.01°	J1+J2:±0.02mm J3:±0.01mm; J4:±0.01°	J1+J2:±0.02mm J3:±0.01mm; J4:±0.01°	J1+J2:±0.02mm J3:±0.01mm;J4:±0.01°
18kg	19kg	22kg	23kg	24kg
IP20	IP20	IP20	IP20	IP20
Floor	Floor	Floor	Floor	Floor
CE、KCS	CE、KCS	CE、KCS	CE、KCS	CE、KCS

| 1-Axis | ±132°   |
|--------|---------|--------|---------|--------|---------|--------|---------|--------|---------|
| 2-Axis | ±150°   |
| 3-Axis | 0~200mm |
| 4-Axis | ±360°   |

1-Axis 450°/s	Resultant velocity	1-Axis <b>450</b> °/s	Resultant velocity	1-Axis 450°/s	Resultant velocity	1-Axis 450°/s	Resultant velocity	1-Axis 450°/s	Resultant velocity
2-Axis 720°/s	7770mm/s	2-Axis <b>720</b> °/s	8488mm/s	2-Axis 720°/s	7050mm/s	2-Axis <b>720</b> °/s	7770mm/s	2-Axis <b>720</b> °/s	7485mm/s
3-Axis 1	130mm/s	3-Axis 11	130mm/s	3-Axis 13	350mm/s	3-Axis 13	350mm/s	3-Axis 1	350mm/s
4-Axis	2300°/s	4-Axis 2	300° /s	4-Axis	705°/s	4-Axis	705°/s	4-Axis	705°/s













ER10-	800-SR
SCARA Series	Industrial Robot

ER20-800-SR-HI ER20-1000-SR-HI SCARA Series Industrial Robot SCARA Series Industrial Robot

ER20C-850-SR-HI SCARA Series Industrial Robot

ER20C-1000-SR-HI

SCARA Series Industrial Robot

ER50-1200-SR SCARA Series Industrial Robot

ER4-550-MI MINI Series Industrial Robot

4-Axis

5-Axis

6-Axis

655°/s

 $700^{\circ}$  /s

823°/s

4-Axis

5-Axis

6-Axis

ER7-910-MI MINI Series Industrial Robot

ER8-720-MI MINI Series Industrial Robot

ER10B-900-MI MINI Series Industrial Robot

Number of Axes	4	4	4	4	4
Max. Load	10kg	20kg	20kg	20kg	20kg
Reach of Arm	800mm	800mm	1000mm 850mm		1000mm
Repeatability	J1+J2:±0.02mm J3:±0.01mm; J4:±0.01°	J1+J2:±0.02mm J3:±0.01mm; J4:±0.01°	J1+J2:±0.02mm J1+J2:±0.02mm J1° J3:±0.01mm; J4:±0.01° J3:±0.015mm; J4:±0.01		J1+J2:±0.02mm J3:±0.015mm ; J4:±0.01°
Body Weight	25kg	47kg	50kg	58.5kg	60kg
IP Grade	IP20	IP20	IP20	IP54	IP54
Installation	Floor Floor Floor		Floor	Floor	
Certifications Supported	CE、KCS	CE、KCS CE、KCS		CE	CE

	1-Axis	±128°	1-Axis	±132°	1-Axis	±132°	1-Axis	±165°	1-Axis	±165°
Range	2-Axis	±150°								
Motion Range	3-Axis	0~200mm	3-Axis	0~420mm	3-Axis	0~420mm	3-Axis	0~400mm	3-Axis	0~400mm
	4-Axis	±360°								

	1-Axis 360°/	Resultant velocity	1-Axis 360°/s	Resultant velocity	1-Axis 360°/s	Resultant velocity	1-Axis 353°/s	Resultant velocity	1-Axis 353°/s	Resultant velocity
Max. Velocity	2-Axis <b>720</b> °/	8063mm/s	2-Axis 590°/s	9550mm/s	2-Axis 590°/s	10806mm/s	2-Axis 564°/s	9666mm/s	2-Axis 564°/s	10590mm/s
Max. V	3-Axis	1350mm/s	3-Axis 1	220mm/s	3-Axis 1	220mm/s	3-Axis 11	120mm/s	3-Axis 1	120mm/s
	4-Axis	705°/s	4-Axis	705°/s	4-Axis	705°/s	4-Axis	705°/s	4-Axis	705°/s

4	6	6	6	6
50kg	4kg	7kg	8kg	10kg
1200mm	550mm	910mm	720mm	900mm
J1+J2:±0.02mm J3:±0.015mm ; J4:±0.01°	±0.02mm	±0.03mm	±0.02mm	±0.03mm
145kg	25kg	48kg	46kg	75kg
IP54	IP65	IP67	IP67	IP54
Floor	Floor/Ceiling	iling Floor/Ceiling Floor/Ceiling		Floor/Ceiling
CE	CE CE CE CI			CE

1-Axis	±165°	1-Axis	±170°	1-Axis	±170°	1-Axis	±170°	1-Axis	±176°
		2-Axis	-90° ~+130°	2-Axis	-80° ~+135°	2-Axis	-80° ~+135°	2-Axis	±140°
2-Axis	±150°	3-Axis	-200° ~ +65°	3-Axis	-90° ~+65°	3-Axis	-90° ~+65°	3-Axis	-200° ~+70°
3-Axis	0~400mm	4-Axis	±190°	4-Axis	±190°	4-Axis	±190°	4-Axis	±173°
		5-Axis	±120°	5-Axis	±120°	5-Axis	±120°	5-Axis	±130°
4-Axis	±360°	6-Axis	±360°	6-Axis	±360°	6-Axis	±360°	6-Axis	±360°
1-Axis 225°		1-Axis	490°/s	1-Axis	420°/s	1-Axis	420°/s	1-Axis	350°/s
	velocity	2-Axis	407°/s	2-Axis	380°/s	2-Axis	380°/s	2-Axis	350°/s
2-Axis 300°	/s 8220mm/s	3-Axis	520°/s	3-Axis	450°/s	3-Axis	450°/s	3-Axis	355°/s

550°/s

500°/s

850°/s

4-Axis

5-Axis

6-Axis

550°/s

 $500^{\circ}$  /s

 $850^{\circ}$  /s

4-Axis

5-Axis

6-Axis

 $480^{\circ}$  /s

 $400^{\circ}$  /s

500°/s

3-Axis

4-Axis

1220mm/s

 $705^{\circ}$  /s





















ER10B-900-MI/3
MINI Series Industrial Robot

ER10B-900-MI/4

ER15-1430-MI ER20-1200-MI
MINI Series Industrial Robot MINI Series Industrial Robot

ER10-2010-HI
Small-Load Series Industrial Robot

ER12B-1510
Small-Load Series Industrial Robot

al Robot Small-Loa

ER20B-1760 ER2
Small-Load Series Industrial Robot Small-Lo

ER20B-1760-HI
Small-Load Series Industrial Robot

ER20-2300-HI Small-Load Series Industrial Robot

ER30B-2700
Small-Load Series Industrial Robot

Number of Axes	3	4	6	6	6
Max. Load	10kg	10kg	15kg	20kg	10kg
Reach of Arm	900mm	900mm	1430mm	1200mm	2010mm
Repeatability	±0.03mm	±0.03mm	±0.03mm	±0.03mm	±0.03mm
Body Weight	50kg	52kg	155kg	148kg	275kg
IP Grade	IP54	IP54	IP67	IP67	Wrist IP65, Body IP54
Installation	Ceiling	Ceiling	Floor/Ceiling	Floor/Ceiling	Floor/Ceiling
Certifications Supported	-	-	CE	CE	CE

upported		-		-		CE		CE		CE
	1-Axis	±140°	1-Axis	±140°	1-Axis	±170°	1-Axis	±170°	1-Axis	±170°
	2-Axis	-200° ~+70°	2-Axis	-200° ~+70°	2-Axis	±140°	2-Axis	±140°	2-Axis	-100° ~+155°
Motion Range	3-Axis	±115°	3-Axis	±115°	3-Axis	-250° ~+70°	3-Axis	-250° ~+70°	3-Axis	-160° ~+86°
Motion			4-Axis	±360°	4-Axis	±210°	4-Axis	±210°	4-Axis	±200°
					5-Axis	±130°	5-Axis	±130°	5-Axis	±135°
					6-Axis	±360°	6-Axis	±360°	6-Axis	±360°
	1-Axis	353°/s	1-Axis	320° /s	1-Axis	270°/s	1-Axis	270° /s	1-Axis	206°/s
	2-Axis	355°/s	2-Axis	355°/s	2-Axis	250°/s	2-Axis	250°/s	2-Axis	206°/s
Max. Velocity	3-Axis	400° /s	3-Axis	400°/s	3-Axis	380°/s	3-Axis	380°/s	3-Axis	238°/s
Ma			4-Axis	480° /s	4-Axis	520°/s	4-Axis	520°/s	4-Axis	480°/s
					5-Axis	460° /s	5-Axis	450° /s	5-Axis	412°/s

6	6	6	6	6
12kg	20kg	20kg	20kg	30kg
1527mm	1756mm	1756mm	2300mm	2700mm
±0.03mm	±0.03mm	±0.03mm	±0.03mm	±0.05mm
164kg	273kg	273kg	502kg	520kg
Wrist IP67, Body IP54	Wrist IP65, Body IP54	Wrist IP65, Body IP54	IP54	Wrist IP65, Body IP54
Floor/Ceiling	Floor/Ceiling	Floor/Ceiling	Floor	Floor
CE	CE	CE	CE	CE

1-Axis	±170°	1-Axis	±170°	1-Axis	±170°	1-Axis	±180°	1-Axis	±180°
2-Axis	-90° ~+155°	2-Axis	-100° ~+155°	2-Axis	-100° ~+155°	2-Axis	-90° ~+135°	2-Axis	-90° ~+135°
3-Axis	-145° ~+85°	3-Axis	-160° ~+86°	3-Axis	-160° ~+86°	3-Axis	-185° ~+80°	3-Axis	-185° ~+80°
4-Axis	±200°	4-Axis	±200°	4-Axis	±200°	4-Axis	±200°	4-Axis	±200°
5-Axis	±135°	5-Axis	±135°	5-Axis	±135°	5-Axis	±130°	5-Axis	±130°
6-Axis	±360°	6-Axis	±360°	6-Axis	±360°	6-Axis	±360°	6-Axis	±360°
1-Axis	242°/s	1-Axis	206°/s	1-Axis	206°/s	1-Axis	172°/s	1-Axis	172°/s
2-Axis	242°/s	2-Axis	206°/s	2-Axis	206°/s	2-Axis	119°/s	2-Axis	134°/s
3-Axis	283°/s	3-Axis	238°/s	3-Axis	238°/s	3-Axis	206°/s	3-Axis	186°/s
4-Axis	480°/s	4-Axis	480°/s	4-Axis	480°/s	4-Axis	255°/s	4-Axis	255°/s
5-Axis	412°/s	5-Axis	412°/s	5-Axis	330° /s	5-Axis	330°/s	5-Axis	330°/s
6-Axis	705°/s	6-Axis	705°/s	6-Axis	407° /s	6-Axis	407°/s	6-Axis	407°/s

07 08

356°/s



















ER35B-1810 Small-Load Series Industrial Robot

±170°

ER50B-2100

 $\pm 180^{\circ}$ 

ER70B-2100

Small-Load Series Industrial Robot Small-Load Series Industrial Robot Small-Load Series Industrial Robot Large Load Series Industrial Robot

ER100B-3000 ER100B-3500-DW

 $\pm 180^{\circ}$ 

ER130B-3200 Large Load Series Industrial Robot

165°/s

 $200^{\circ}$  /s

 $220^{\circ}$  /s

4-Axis

5-Axis

6-Axis

4-Axis

5-Axis

6-Axis

ER160B-3200 Large Load Series Industrial Robot

165°/s

 $150^{\circ}$  /s

200°/s

4-Axis

6-Axis

ER170B-2650 Large Load Series Industrial Robot

ER220-2700 Large Load Series Industrial Robot

ER220-3100 Large Load Series Industrial Robot

Number of Axes	6	6	6	6	6
Max. Load	35kg	50kg	70kg	100kg	100kg
Reach of Arm	1813mm	2110mm	2110mm	3000mm	3500mm
Repeatability	±0.04mm	±0.05mm	±0.05mm	±0.06mm	±0.06mm
Body Weight	277kg	522kg	522kg	1053kg	1050kg
IP Grade	Wrist IP65, Body IP54				
Installation	Floor	Floor/Ceiling	Floor/Ceiling	Floor	Rack mounting
Certifications Supported	CE	CE	CE	CE	CE

	2-Axis	-100° ~+155°	2-Axis	-90° ~+135°	2-Axis	-90° ~+135°	2-Axis	-60° <b>∼</b> +80°	2-Axis	-40° ~+170°
Motion Range	3-Axis	-160° ~+86°	3-Axis	-185° ~+80°	3-Axis	-185° ~+80°	3-Axis	-95° <b>∼</b> +80°	3-Axis	-95° ~+80°
Motion	4-Axis	±200°	4-Axis	$\pm 200^{\circ}$	4-Axis	±200°	4-Axis	±200°	4-Axis	±200°
	5-Axis	$\pm 130^{\circ}$	5-Axis	±130°	5-Axis	±130°	5-Axis	$\pm 130^{\circ}$	5-Axis	±130°
	6-Axis	±360°	6-Axis	±360°	6-Axis	±360°	6-Axis	±360°	6-Axis	±360°
	1-Axis	206°/s	1-Axis	172°/s	1-Axis	172°/s	1-Axis	120°/s	1-Axis	120° /s
	2-Axis	206°/s	2-Axis	119°/s	2-Axis	134°/s	2-Axis	110°/s	2-Axis	110°/s
Max. Velocity	3-Axis	238°/s	3-Axis	186°/s	3-Axis	186°/s	3-Axis	120°/s	3-Axis	120°/s
Wa	4-Axis	480°/s	4-Axis	255°/s	4-Axis	245°/s	4-Axis	140°/s	4-Axis	125°/s
	5-Axis	330°/s	5-Axis	254°/s	5-Axis	245°/s	5-Axis	200°/s	5-Axis	200° /s
	6-Axis	407°/s	6-Axis	366° /s	6-Axis	355°/s	6-Axis	285°/s	6-Axis	285°/s

	6		6	6			6		6	
	130kg		160kg		170kg		220kg		220kg	
	3200mm		3200mm	2650mm			2700mm		3100mm	
	±0.06mm	:	±0.06mm		±0.06mm		±0.06mm		±0.06mm	
	1120kg		1150kg		1090kg	1320kg			1345kg	
Wrist	IP65, Body IP54	Wrist	IP65, Body IP54	Wrist IP65, Body IP54		Wris	t IP67, Body IP54	Wris	st IP67, Body IP54	
	Floor		Floor	Floor			Floor		Floor	
	CE		CE		CE		CE		CE	
1-Axis	±180°	1-Axis	±180°	1-Axis	±180°	1-Axis	±180°	1-Axis	±180°	
2-Axis	-60° <b>∼</b> +80°	2-Axis	-60° ~+80°	2-Axis	-60° <b>∼</b> +80°	2-Axis	-60° ~ +80°	2-Axis	-60° ~+80°	
3-Axis	-95° <b>~</b> +80°	3-Axis	-95° ~+80°	3-Axis	-95° <b>~</b> +80°	3-Axis	-180° <b>∼</b> +80°	3-Axis	-180° <b>∼</b> +80°	
4-Axis	±250°	4-Axis	±250°	4-Axis	±200°	4-Axis	±360°	4-Axis	±360°	
5-Axis	±125°	5-Axis	±125°	5-Axis	±125°	5-Axis	±125°	5-Axis	±125°	
6-Axis	±360°	6-Axis	±360°	6-Axis	±360°	6-Axis	±360°	6-Axis	±360°	
1-Axis	128°/s	1-Axis	128°/s	1-Axis	120° /s	1-Axis	120°/s	1-Axis	120° /s	
2-Axis	110°/s	2-Axis	100°/s	2-Axis	110°/s	2-Axis	100°/s	2-Axis	100° /s	
3-Axis	120°/s	3-Axis	110°/s	3-Axis	120° /s	3-Axis	100°/s	3-Axis	100° /s	

205°/s

 $220^{\circ}$  /s

310°/s

4-Axis

5-Axis

6-Axis

 $182^{\circ}$  /s

175°/s

235°/s

4-Axis

5-Axis

6-Axis

170°/s

 $140^{\circ}$  /s

210°/s



















ER270-2700
Large Load Series Industrial Robot

ER280-3200 Large Load Series Industrial Robot

ER350-3200
Large Load Series Industrial Robot

ER350-3300 Large Load Series Industrial Robot

ER420-3300
Large Load Series Industrial Robot

ER500-2800
Large Load Series Industrial Robot

ER700-2800
Large Load Series Industrial Robot

ER45-2200-BD

ER80B-2565-BD

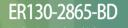
Number of Axes	6	6	6	6
Max. Load	270kg	280kg	350kg	350kg
Reach of Arm	2700mm	3200mm	3200mm	3300mm
Repeatability	±0.06mm	±0.06mm	±0.06mm	±0.1mm
Body Weight	1350kg	1550kg	1850kg	2650kg
IP Grade	Wrist IP67, Body IP54	Wrist IP65, Body IP54	Wrist IP65, Body IP54	IP54
Installation	Floor	Floor	Floor	Floor
Certifications Supported	CE	CE	CE	CE

	1-Axis	±180°	1-Axis	±180°	1-Axis	±180°	1-Axis	±180°
	2-Axis	-60° ~+80°	2-Axis	-60° ~+90°	2-Axis	-60° ~+90°	2-Axis	-60° ~+105°
Motion Range	3-Axis	-180° <b>~</b> +80°	3-Axis	-30° ~+125°	3-Axis	-30° ~+125°	3-Axis	-30° ~+125°
Motio	4-Axis	±360°	4-Axis	±200°	4-Axis	±200°	4-Axis	±200°
	5-Axis	±125°	5-Axis	±125°	5-Axis	±125°	5-Axis	±115°
	6-Axis	±360°	6-Axis	±360°	6-Axis	±360°	6-Axis	±360°
	1-Axis	120°/s	1-Axis	115°/s	1-Axis	120° /s	1-Axis	80° /s
	2-Axis	100°/s	2-Axis	100°/s	2-Axis	100° /s	2-Axis	100°/s
Max. Velocity	3-Axis	100°/s	3-Axis	100°/s	3-Axis	100° /s	3-Axis	100°/s
Ma	4-Axis	170°/s	4-Axis	175°/s	4-Axis	180°/s	4-Axis	114°/s
	5-Axis	140°/s	5-Axis	145°/s	5-Axis	130°/s	5-Axis	87°/s
	6-Axis	210°/s	6-Axis	200° /s	6-Axis	230°/s	6-Axis	158°/s

6	6	6	6	6	
420kg	500kg	700kg	45kg	80kg	
3300mm	2800mm	2800mm	2200mm	2565mm	
±0.1mm	±0.1mm	±0.1mm	±0.03mm	±0.04mm	
2980kg	1120kg	2930kg	520kg	730kg	
IP54	IP54	IP54	IP54	IP54	
Floor	Floor	Floor	Floor	Floor	
CE	CE	CE	CE	CE	

1-Axis	±180°	1-Axis	±180°	1-Axis	±180°	1-Axis	±190°	1-Axis	±185°
2-Axis	-60° ~+105°	2-Axis	-60° ~+105°	2-Axis	-60° ~+105°	2-Axis	-70° ~+110°	2-Axis	-67° ~+150°
3-Axis	-30° ~+125°	3-Axis	-30° ~+140°	3-Axis	-30° ~+140°	3-Axis	-95° ~+62°	3-Axis	-190° ~+66°
4-Axis	±200°	4-Axis	±200°	4-Axis	±200°	4-Axis	+200°	4-Axis	±200°
5-Axis	±115°	5-Axis	±115°	5-Axis	±115°	5-Axis	±130°	5-Axis	±130°
6-Axis	±360°								
1-Axis	80°/s	1-Axis	80°/s	1-Axis	80°/s	1-Axis	172°/s	1-Axis	114°/s
2-Axis	100°/s	2-Axis	100°/s	2-Axis	100°/s	2-Axis	119°/s	2-Axis	108°/s
3-Axis	100°/s	3-Axis	100°/s	3-Axis	100°/s	3-Axis	193°/s	3-Axis	133°/s
4-Axis	114°/s	4-Axis	114°/s	4-Axis	114°/s	4-Axis	296°/s	4-Axis	255°/s
5-Axis	87°/s	5-Axis	87°/s	5-Axis	70°/s	5-Axis	247°/s	5-Axis	197°/s
6-Axis	158°/s	6-Axis	158°/s	6-Axis	158°/s	6-Axis	355°/s	6-Axis	285°/s





ER60-2000-PL

ER120-2400-PL

ER180-3100-PL

ER500-3200-PL
Palletizing Series Industrial Robot



ER8-1450-HW

Welding Series Industrial Robot



ER12-2000-HW
Welding Series Industrial Robot



ER8-1500-CW
Welding Series Industrial Robot



ER8-2000-CW
Welding Series Industrial Robot

Number of Axes	6	4	4	4	4
Max. Load	130kg	60kg	120kg	180kg	500kg
Reach of Arm	2865mm	2000mm	2400mm	3060mm	3200mm
Repeatability	±0.04mm	±0.03mm	±0.04mm	±0.04mm	±0.1mm
Body Weight	950kg	500kg	1050kg	1120kg	2083kg
P Grade	IP54	IP54	IP54	IP54	IP54
nstallation	Floor	Floor	Floor	Floor	Floor
Certifications Supported	CE	CE	CE	CE	CE
	1-Axis ±180°				

	2-Axis	-70° ~+90°	2-Axis	-35° ~+90°	2-Axis	-40° ~+85°	2-Axis	-40° ~+90°	2-Axis	-45° ~+90°
Motion Range	3-Axis	-200° ~+68°	3-Axis	-10° ~+110°	3-Axis	-20° ~+108°	3-Axis	-17° ~+108°	3-Axis	-15° ~+120°
Motior	4-Axis	±200°	4-Axis	±360°	4-Axis	±360°	4-Axis	±360°	4-Axis	±360°
	5-Axis	±125°								
	6-Axis	±360°								
	1-Axis	112°/s	1-Axis	170°/s	1-Axis	114°/s	1-Axis	114°/s	1-Axis	85°/s
>	2-Axis	106°/s	2-Axis	148°/s	2-Axis	120°/s	2-Axis	108°/s	2-Axis	90°/s
Max. Velocity	3-Axis	106°/s	3-Axis	185°/s	3-Axis	149°/s	3-Axis	118°/s	3-Axis	90°/s
Wa	4-Axis	204°/s	4-Axis	285°/s	4-Axis	295°/s	4-Axis	295°/s	4-Axis	200° /s
	5-Axis	198°/s								
	6-Axis	212°/s								

	6	6			6		6	
	8kg	12kg			8kg		8kg	
	1445mm		2015mm		1527mm		2010mm	
	±0.08mm		±0.08mm		±0.05mm		±0.05mm	
	170kg		286kg		165kg		281kg	
	IP54		IP54		IP54		IP54	
	Floor/Ceiling		Floor/Ceiling		Floor/Ceiling		Floor/Ceiling	
	CE		CE		CE		CE	
1-Axis	±170°	1-Axis	±170°	1-Axis	±170°	1-Axis	±170°	
2-Axis	-85° ~+160°	2-Axis	-100° ~155°	2-Axis	-90° ~155°	2-Axis	-100° ~155°	
3-Axis	-150° ~+85°	3-Axis	-160° ~86°	3-Axis	-145° ~85°	3-Axis	-160° ~86°	
4-Axis	±150°	4-Axis	±200°	4-Axis	±170°	4-Axis	±170°	
5-Axis	±135°	5-Axis	±135°	5-Axis	±135°	5-Axis	±135°	
6-Axis	±210°	6-Axis	±210°	6-Axis	±360°	6-Axis	±360°	
1-Axis	240°/s	1-Axis	206°/s	1-Axis	242°/s	1-Axis	180°/s	
2-Axis	240° /s	2-Axis	206° /s	2-Axis	242° /s	2-Axis	180°/s	
3-Axis	260° /s	3-Axis	238° /s	3-Axis	283°/s	3-Axis	242° /s	
4-Axis	440°/s	4-Axis	442° /s	4-Axis	476°/s	4-Axis	480°/s	
5-Axis	400°/s	5-Axis	412°/s	5-Axis	412°/s	5-Axis	412°/s	
6-Axis	700° /s	6-Axis	700° /s	6-Axis	685°/s	6-Axis	705°/s	





















ER15-1520-PR

ER150-3200-PR

ER30B-1810-P

ER50B-2100-P

ER170-2650-P

ER10-500-SR-C ER10-600-SR-C ER10-700-SR-C ER10-800-SR-C ER7-910-MI-PI-C ER8-720-MI-PI-C

550°/s

500°/s

850°/s

6-Axis

Number of Axes	4	6	6	6	6
Max. Load	15kg	150kg	30kg	50kg	170kg
Reach of Arm	1520mm	3200mm	1813mm	2110mm	2650mm
Repeatability	±0.03mm	±0.06mm	±0.04mm	±0.08mm	±0.06mm
Body Weight	160kg	1350kg	284kg	550kg	1050kg
IP Grade	IP54	Wrist IP65, Body IP54	Wrist IP67, Body IP54	Wrist IP67, Body IP54	Wrist IP67, Body IP54
Installation	Floor	Floor	Floor	Floor	Floor
Certifications Supported	CE	CE	CE	CE	CE

Certifications Supported		CE		CE		CE		CE		CE
	1-Axis	±180°	1-Axis	$\pm 180^{\circ}$	1-Axis	±170°	1-Axis	$\pm 180^{\circ}$	1-Axis	±180°
a	2-Axis	-40° ~+90°	2-Axis	-60° ~+80°	2-Axis	-100° ~+155°	2-Axis	-90° ~+135°	2-Axis	-60° ~+80°
Motion Range	3-Axis	-15° ~+105°	3-Axis	-180° <b>~</b> +80°	3-Axis	-160° ~+86°	3-Axis	-185° ~+80°	3-Axis	-95° ~+80°
Mot	4-Axis	±360°	4-Axis	±300°	4-Axis	±200°	4-Axis	±200°	4-Axis	±200°
			5-Axis	±125°	5-Axis	±130°	5-Axis	±130°	5-Axis	±125°
			6-Axis	±360°	6-Axis	±360°	6-Axis	±360°	6-Axis	±360°
	1-Axis	250°/s	1-Axis	120°/s	1-Axis	206°/s	1-Axis	172°/s	1-Axis	120°/s
	2-Axis	215°/s	2-Axis	100°/s	2-Axis	206°/s	2-Axis	119°/s	2-Axis	110°/s
Max. Velocity	3-Axis	285°/s	3-Axis	100°/s	3-Axis	238°/s	3-Axis	186°/s	3-Axis	120° /s
Max. \	4-Axis	450°/s	4-Axis	170°/s	4-Axis	480°/s	4-Axis	252°/s	4-Axis	205°/s
			5-Axis	160°/s	5-Axis	320°/s	5-Axis	247°/s	5-Axis	180°/s
			6-Axis	200°/s	6-Axis	407°/s	6-Axis	359°/s	6-Axis	215°/s

4	4	4	4	6	6
10kg	10kg	10kg	10kg	7kg	8kg
500mm	600mm	700mm	800mm	910mm	720mm
J1+J2:±0.02mm J3:±0.01mm; J4:±0.01°	J1+J2:±0.02mm J3:±0.01mm; J4:±0.01°	J1+J2:±0.02mm J3:±0.01mm ; J4:±0.01°	J1+J2:±0.02mm J3:±0.01mm; J4:±0.01°	±0.03mm	±0.02mm
23kg	24kg	25kg	25kg	48kg	48kg
ISO Class 4 ISO Class 4		ISO Class 4	ISO Class 4	IP Grade: IP65 Cleanliness: ISO Class 5	IP Grade: IP65 Cleanliness: ISO Class 5
Floor	Floor	Floor	Floor	Floor/Ceiling	Floor/Ceiling
CE、KCS	CE、KCS	CE、KCS	CE、KCS	CE	CE
1-Axis ±130°	1-Axis ±130°	1-Axis ±130°	1-Axis ±130°	1-Axis $\pm 170^{\circ}$	1-Axis $\pm 170^{\circ}$
				2-Axis -80° ~+135°	2-Axis -80° ~+135°
2-Axis ±150°	2-Axis ±150°	2-Axis ±150°	2-Axis ±150°	3-Axis -90° ~+65°	3-Axis -90° ~+65°
3-Axis 0~200mm	3-Axis 0~200mm	3-Axis 0~200mm	3-Axis 0~200mm	4-Axis ±190°	4-Axis ±190°
				5-Axis ±120°	5-Axis ±120°
4-Axis ±360°	4-Axis $\pm 360^{\circ}$	4-Axis ±360°	4-Axis ±360°	6-Axis ±360°	6-Axis ±360°
1-Axis 450°/s Resultant	1-Axis 450°/s Resultant	1-Axis 450°/s Resultant	1-Axis 450°/s Resultant	1-Axis $420^{\circ}$ /s	1-Axis $420^{\circ}$ /s
velocity	velocity	velocity	velocity	2-Axis 380°/s	2-Axis $380^{\circ}$ /s
2-Axis 720° /s 7050mm/s	2-Axis 720°/s 7770mm/s	2-Axis 720°/s 7487mm/s	2-Axis 720°/s 8063mm/s	3-Axis 450°/s	3-Axis 450°/s

1350mm/s

705°/s

3-Axis

4-Axis

1350mm/s

705°/s

15 16

1350mm/s

 $705^{\circ}$  /s

3-Axis

4-Axis

3-Axis

4-Axis

1350mm/s

705°/s

















S3-60 Eco Collaborative Robot

S5-90 Eco Collaborative Robot

S10-140 Eco

S20-180 Eco

S3-60 Pro

S5-90 Pro
Collaborative Robot

S10-140 Pro

S20-180 Pro

Model	S3-60 Eco	S5-90 Eco	S10-140 Eco	S20-180 Eco	
DOF			6		
Payload (kg)	3	5	10	20	
Reach (mm)	575.8	919	1400	1777.5	
Repeatability (mm)	±0.03	±0.03	±0.03	±0.1	
Weight (kg)	14	21	37	58	
Safety		Hand guide, adjus	stable collisiondetection		
Certification	EN ISO 13849-1 PLd Cat.3 & EN ISO 10218-1				
IP Classification	IP54				
Max. Speed at Tool End (m/s)	2	2.5	2.5	3.2	
Working Range	Axis1/2/4/5/6: ±360°  Axis3: ±160°				
Max. Speed	[ S3/S5	Axis 1/2/3: 150 °/s	[S20] Axis1/2: 11	0°/s Axis3: 150°/s	
Mounting	Any orientation				
Operating Temp.		0	- 50 °C		
Operating Humidity		7	'0% RH		
Flange Connector	[ \$3/\$5/\$	510 ] ISO 9409-1-50-4-M6	[ S20 ] ISO 9409-1-50-	6-M6	
Flange Communication		2 DI, 2DO, 24VDC,	MODBUS RTU, RS485		

Model	S3-60 Pro	S5-90 Pro	S10-140 Pro	S20-180 Pro		
DOF		6				
Payload (kg)	3	5	10	20		
Reach (mm)	575.8	919	1400	1777.5		
Repeatability (mm)	±0.03	±0.03	±0.03	±0.1		
Weight (kg)	14	21	37	58		
Torque Sensor Accuracy - Composition Error (F.S)		<2%				
Torque Sensor Accuracy - Repeatability Error (F.S)	<0.2%					
Safety	Hand guide, adjustable collisiondetection					
Certification	EN ISO 13849-1 PLd Cat.3 & EN ISO 10218-1					
IP Classification		IP54				
Max. Speed at Tool End (m/s)	2	2.5	2.5	3.2		
Working Range		Axis1/2/4/5/6: ±360°	Axis3: ±160°			
Max. Speed	[ \$3/\$5/\$10	0] Axis1/2/3: 150°/s [: Axis4/5/6: 1		xis3: 150°/s		
Mounting		Any oriental	ion			
Operating Temp.	0 - 50 °C					
Operating Humidity	70% RH					
Flange Connector		ISO 9409-1-50-	4-M6			
Flange Communication		2 DI, 2DO, 24VDC, MODBI	JS RTU,RS485			

### ESTUN CoDroid | Collaborative Robot

# **Palletizing Solutions**

### **泠**

### **READY TO USE, RAPID DEPLOYMENT**

Plug and play, requiring only power and air supply connections for setup within 30 minutes. meeting fast-paced production without professionals to configure.



### TERMINAL COMPATIBILITY, UNLIMITED CONNECTION

Supporting PC, tablet, and mobile devices to connect and log in directly via the web to teach pendant interface freely.



#### **GRAPHICAL PROCESS KIT, EASY PROGRAMMING**

Professional palletizing package with graphical guidance and no-code programming. Complete palletizing program setup with drag teaching, enabling easy programming in just "3 minutes" with "zero experience".



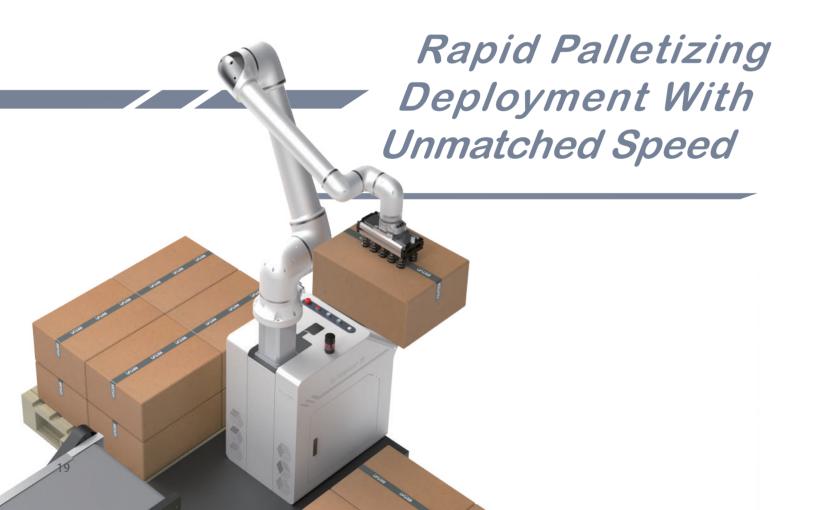
### **CUSTOMIZABLE STACK PATTERNS, ENSURING STABILITY**

Define stack patterns through animated interactions, achieving tighter stacking with leaning palletizing.



### MORE FLEXIBILITY, EASY TO MOVE

Compatible with various sizes, weights, and materials of boxes, supporting mixed-size stacking. Easy to move among different production lines, making it ideal for various production and logistics scenarios.



### **Specifications**

Model C	o-Palletizer 20 (Fixed)		Co-Palletizer 20 (Elevating)
Payload(kg)		20	
Working Radius		1777.5	
Horizontal Distance(Pallet Size)(r	mm)	1200*1200	
Max. Joint Speed		Axis1/2: 110°/s Axis3: 150°/s Axis4/5/6: 180°	°/s
Repeatability(mm)		±0.1	
Communication	Analo	og, Digital, MODBUS RTU, MODBUS TCP, CA	AN, RS485
IP Classification		IP54(arm)	
Operating temp.( $^{\circ}$ C)		0 - 50	
Weight(kg)	270		300
Footprint(mm)		1530*1480	
Rated Voltage(V)		220	
Max. Power Consumption(W)		3000	
Palletizing Speed		8-12/min	
Palletizing Height(mm)	1930		2430
Compatible surfaces		Cardboard, smooth surfaces	



### **ESTUN CoDroid**

Collaborative Robot

# **Series-Control Cabinet**



## COB-A03/05/10/20

Model		COB-A03	COB-A05	COB-A10	COB-A20		
Typical power		0.2KW	0.25kW	0.35kW	0.75kW		
Peak power		1KW	2kW	2kW	3kW		
Power supply	AC		100~240	V 50/60Hz			
	DC		48V (-15	5%~+0%)			
IP classification			IF	20			
Working condition	on		Temperature: 0-40°C, Humidity: 10~90%RH, Non-condensing				
Communication	Default		TCP IP, Modb	TCP IP, Modbus TCP, RS485			
interface	Option		PROFINET(slave),				
	Power supply		24V, 2A				
IO interface	Digital		PNP, 16 channels, Input voltage 11-30V, Input current 3mA				
			NPN, 8 channels, Maximum output 125mA for a single group				
	Analog		4 channels, Al: Current mode/voltage mode, AO: Current mode				
			Resolution: 12bit, Voltage: 0~10V/Current: 4~20mA				
	Safety interface		7 channels of safety emergency stop input				
Redevelopment			C#, C++	-, Python			
Cabinet dimension	on		380*26	)*210mm			
Cable length	Default		Robot-Cabinet: 3m, Cabinet	power cable: 3m, Handle: 5m			
	Option		Robot-Cab	inet: 6/12m			
WIFI			Not su	pported			

### PAD Teach Pendant optional

Teach Pendant	Pad
Weight	550g
Display Size	12.7 inch



### End Effectors

Various end effectors can be quickly switched to match multiple industry applications











Handling

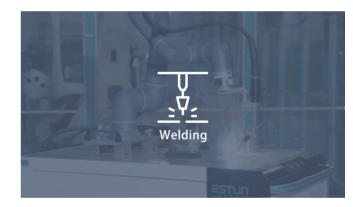
Screw fastening

Polishing

Welding

Spraying

### Application Scenarios

















### **CONTROL SYSTEM**

### **ERC3-C Series Control Cabinet**

- A next-generation integrated motion control system with comprehensive performance improvements;
- Volume reduced by more than 50% compared to the previous generation, with power density among the industry's best. Supports vertical, horizontal, and stacked installation for more flexible setup;
- Common DC bus design for energy saving and emission reduction;
- Supports online software upgrades, one-click parameter upload and download, with extensive external interfaces for easy customer wiring;
- Compatible with DI/DO, differential input ABZ, PN gateway, and various expansion cards for greater flexibility;
- Integration of advanced motion planning and vibration suppression algorithms for significantly improved precision and speed;
- Supports TCP/IP communication as well as mainstream bus communications like Profinet, EtherNet/IP, EtherCAT, and ModbusTCP.



### **ERC3-S Series Control Cabinet** (Available in China)

- A next-generation integrated drive and control system to achieve high performance and high reliability;
- Volume reduced by over 50% compared to the previous generation, supporting vertical and stackable installation for increased flexibility;
- · Common DC bus design for energy saving and emission reduction;
- Dual-cycle internal and external design achieving IP54 high protection rating;
- Safety stop function compliant with CE requirements, expanding usability scope;
- Brand-new industrial design enhancing safety, convenience, and comfort while improving aesthetics;
- Over 80% reduction in cabinet internal wiring harnesses, with a modular structure for easy disassembly and product maintenance;
- Integration of advanced motion planning and vibration suppression algorithms significantly enhancing precision and speed;
- Supports for TCP/IP communication as well as mainstream bus communications like Profinet, EtherNetIP, Ethercat, ModbusTCP, etc.



#### **ERS Series Electrical Cabinet**

- Brand-new industrial design, enhancing safety, convenience, and comfort while improving aesthetics;
- Dual-cycle internal and external design achieving IP54 high protection rating;
- Modular design of internal electrical modules in the control cabinet, coupled with a new heat dissipation solution for improved cooling performance and higher stability;
- Integration of external axis cabinets into the control cabinet, saving on-site space;
- Specific enhancements for the automotive industry including profisafe, managed switches, independent 24V power supply, and aviation plug connections as optional features:
- Supports for TCP/IP communication as well as mainstream bus communications such as Profinet, EtherNetIP, Ethercat, ModbusTCP, etc.



### **ERT76-A Teach Pendant**

- Designed with ergonomic principles for comfortable and lightweight operation;
- Dual-channel safety switches to ensure personnel safety during operation;
- Equipped with USB interface supporting import/export of teach programs;
- Compliant with IP54 protection rating, suitable for harsh operating environments.



### **ESS Edition CE Functional Safety Products**

- Safety stop;
- Safe speed monitoring;
- Safe position and area monitoring;
- Low-speed teach monitoring, 250mm/s speed monitoring;
- · TCP end effector position and speed monitoring;
- Safety bus communication, supporting Profisafe, FSoE, CIP-Safety safety protocols;
- Robot certified by TÜV Rheinland, compliant with ISO10218-1 and EN13849;
- Functional safety level: PLd, Cat3.



### **Additional Axis Electrical Control Products**

- Versatile applications: single axis, gantry axis, positioners, etc.;
- Flexible configuration: 1 to 3 drives can be housed in the same cabinet;
- Wide range of power options: includes 1KW to 7.5KW full series of custom servo drives and motors from Estun Robotics;
- Optional cable lengths: flexible interconnecting cables available in lengths from 5m to 30m:
- Convenient cabinet placement: allows installation on top of robot control cabinets without occupying additional space.



### **APPLICATION SOFTWARE**

### Offline programming software for PC—EstunEditor

ESTUN Robotics programming software adopts a modular design aimed at enhancing user-friendliness. The software offers two programming modes (text/graphical) to cater to different preferences. It provides abundant command prompts and allows users to conveniently write project programs using drag-and-drop graphical interfaces. The software also offers a user-friendly interface for controlling the robot and IO. Additionally, it features a simulation model that demonstrates the current posture of the robot. The software integrates Editor's proprietary visual software, script tools, virtual teaching pendant, and other tools. It includes multiple modules such as zero calibration, tool coordinate calibration, and user coordinate calibration to streamline the debugging process.



### Application programming interface—ESTUN API

ESTUN API offers a comprehensive set of interface calling libraries for users to engage in secondary development and achieve control over robots. It provides support for multiple programming languages, including C++, C# and VB, catering to the diverse development needs of users.



### Load assessment software - ERLOAD

It supports the evaluation of the load capacity for ESTUN's full range of robots. By inputting parameters such as mass, center of gravity and inertia, users can determine whether the selected robot model is suitable and achieve efficient selection.



### PC-based teach pendant software—ERTEACH

ERTEACH is a PC-based teach pendant software that facilitates user-friendly programming and program viewing.



### **PROCESS SOFTWARE**

### **ESTUN ARC WELDING**

- Supports multiple welding machine communication protocols such as CANopen, CAN, and I/O, adaptable to various mainstream welding machines;
- Provides advanced functionalities including current and voltage monitoring, wire sticking detection with auto-clearing, arc restart, arc backtracking, arc retry, 3D weaving, intermittent welding, positioner collaboration, multi-station scheduling, and power-off recovery;
- Features laser locating and tracking capabilities for precise positioning and real-time tracking of small radius arcs, enhancing welding quality while reducing demands on workpiece consistency;
- Includes an API interface library with arc welding-specific interfaces, catering to customized robot motion control requirements and seamless integration with customer-specific logic or products;
- Supports OPC UA data monitoring, enabling remote arc welding data monitoring when combined with relevant hardware.



### **Spot Welding**

- Supports Profinet, EthemeMP, and I/O communication protocols, compatible with various brands of ESTUN controllers;
- Dedicated spot-welding process interface and commands, simplifying user operations;
- Features electrode cap loss calculation and TCP automatic compensation, electrode holder deflection compensation, workpiece thickness detection, and pressure curve control, enhancing welding quality;
- Supports servo weld gun, pneumatic electrode holder, fixture, and servo weld gun quick change control, which improves system flexibility;
- High-performance dynamic control and path planning algorithms, to increase cycle time, reduce jitter, and enhance accuracy.



#### LASER WELDING

- Developed proprietary laser welding software with dedicated laser welding commands for convenient and efficient programming operations;
- Offers a wide range of laser welding process parameters to meet ODM customer application standards;
- Supports analog and digital signal interaction, with reserved EtherCAT communication interface for expandability to other communication methods;
- Features line laser seam finding and laser tracking capabilities for effective identification and tracking of weld seams;
- Enables coordinated control of laser welding parameters such as laser power and wire feeding speed, allowing segmented control of the welding process;
- Supports additional axis linked interpolation functionality.

### **Bending**

- Supports two communication methods: I/O and Ethernet.
- The network communication mode is simple, eliminating the need for complex wiring.
- Enables real-time monitoring of bending machine signals, die parameters, bending speed, etc., allowing for accurate tracking of bending motion.
- Offers flexible layout, allowing for convenient operation without the need for recalibration when changing dies.
- Incorporates high-precision displacement sensors to achieve automatic feeding to ensure bending accuracy.



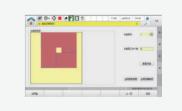
### Gluing

- Compatible with popular gluing systems such as SCA and INTEC;
- User-friendly interface with flexible process configuration to meet various application requirements;
- Supports matching of gluing parameters with robot motion speed, allowing for real-time adjustment of gluing parameters to meet quality requirements;
- Provides real-time monitoring through communication, allowing for the inspection of gluing status, flow rate, gas curves, etc.;
- The first domestically developed gluing software package, catering to gluing applications in industries such as automotive and lithium batteries.



### **Palletizing**

- Utilizes a graphical interface design for simple and efficient operation;
- Includes commonly used pallet patterns for easy debugging and supports configuration for complex and custom pallet patterns;
- Built-in palletizing program templates and pre-installed template programs eliminate the need for programming, and use of real-time monitoring makes it easy for users to understand system status.



### **Pressing**

- User-friendly interface with flexible process configuration to meet various application requirements;
- Incorporates safety detection mechanisms to ensure safe interaction between robots and equipment;
- Equipped with high-performance dynamic models, new speed planning, and vibration suppression algorithms, significantly improving operation cycle time and increasing user productivity.



### **VISION PRODUCT SERIES**

### **ESTUN Vision**

ESVision is a powerful 2D machine vision software that integrates various algorithm components for machine vision applications. It can be quickly configured to perform tasks such as object detection, measurement, and defect detection on workpieces or objects under test. Leveraging ESTUN's years of expertise in algorithm technology, the platform boasts a robust library of vision analysis tools, to enable the easy and flexible development of machine vision applications. It can fulfill various requirements in material recognition, locating and sorting, conveyor tracking, measurement, QR code/barcode/character recognition, and inspection in the field of machine vision. It offers abundant features, stable performance and a user-friendly interface. Communication protocols such as TCP/IP, I/O and serial ports are supported, facilitating seamless data interaction with robots, PLCs, and peripheral devices.

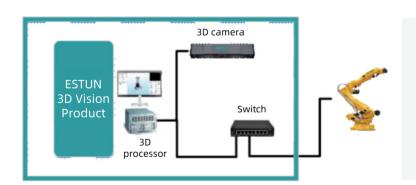


### **ESTUN 2D Vision System Components:**

Hardware: Industrial camera, lens, light source, vision processor, switch, matching cables, security lock, etc.

Software: ESTUN 2D Vision System Software - ESVision2D

### **3D VISION**



### **ESTUN 3D Vision System Components:**

Hardware: 3D industrial camera, 3D vision processor, switch, matching cables

Software: ESTUN 3D Vision System Software

3D Vision Random Picking









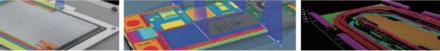
3D Vision Trajectory Guidance







3D Vision Online Quality Inspection



### **Complete Vision Solution of ESTUN**







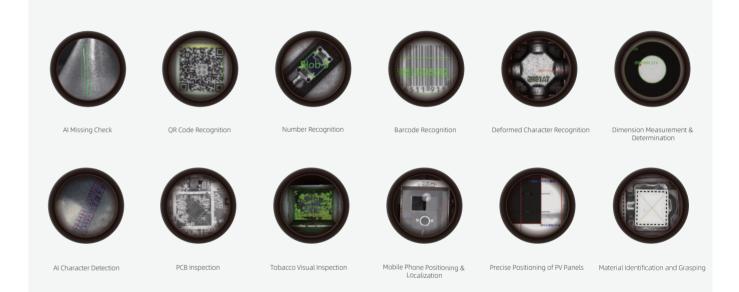


Recognition and Grasping of Condenser Tubes

3D Bin-Picking

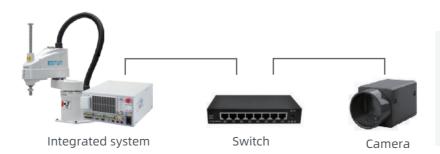
PV Panel Layout Application

Vision-Guided Gluing



### **Integrated Solution for Visual Control**

By integrating the vision software with the robot control system, the system adopts a Client-Server (CS) architecture. The server-side is deployed on the robot controller to handle vision algorithm processing and robot data exchange. The client-side is deployed on the user's computer, allowing the user to configure projects, monitor the server's runtime status, and view image processing results in real time.



- Cost reduction for the entire vision and robot solution.
- Improved stability in communication between vision and robot systems.
- 20% reduction in communication latency between vision and robot systems.
- Simplified overall system architecture.

PC/APP

Cloud platform

EM-PCS platform

# We also offer high-end motion control solutions for the industry

As a leading enterprise in China's intelligent manufacturing industry, ESTUN cultivates and operates two advantageous brands in the motion control field: ESTUN and TRIO. Leveraging a comprehensive product line, ESTUN has developed high-performance motion control solutions tailored to various application scenarios, covering the complete product series from the information layer, control layer, drive layer, to the execution layer. This provides partners with a broader range of solution options. Our product offerings include CNC systems, HMIs, a full range of AC servo systems from 50W to 200kW, linear drives, multiple series of high-end TRIO motion controllers, Motion PLCs, IoT modules, and more. We are committed to delivering efficient, precise, and comprehensive motion control solutions, facilitating the manufacturing industry's transition towards automation, intelligence, and digitalization.

