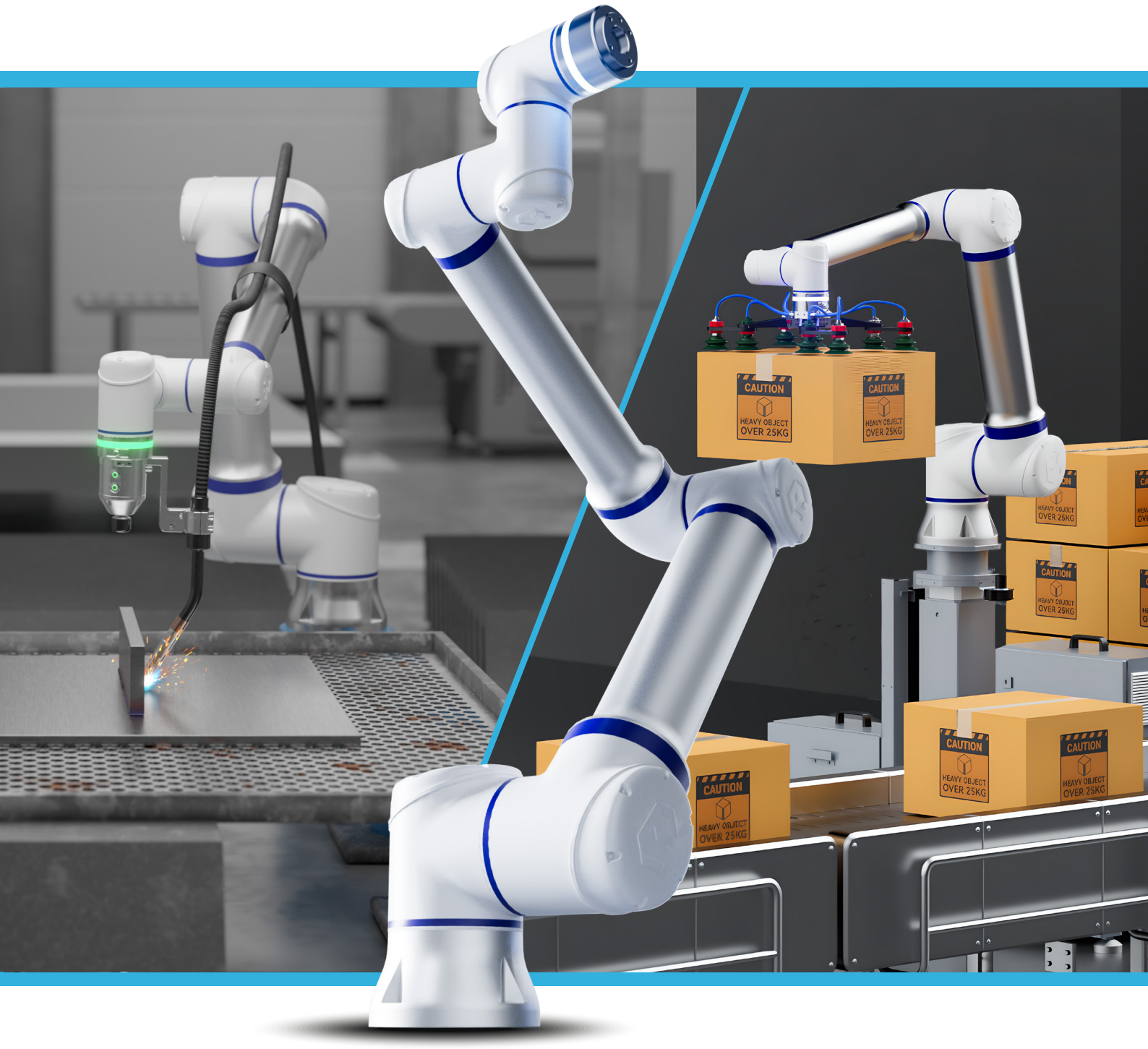
ELITE ROBOTS

COBOTS & SOLUTIONS
PRODUCT PORTFOLIO



www.eliterobots.com

ELITE ROBOTS

CS SERIES

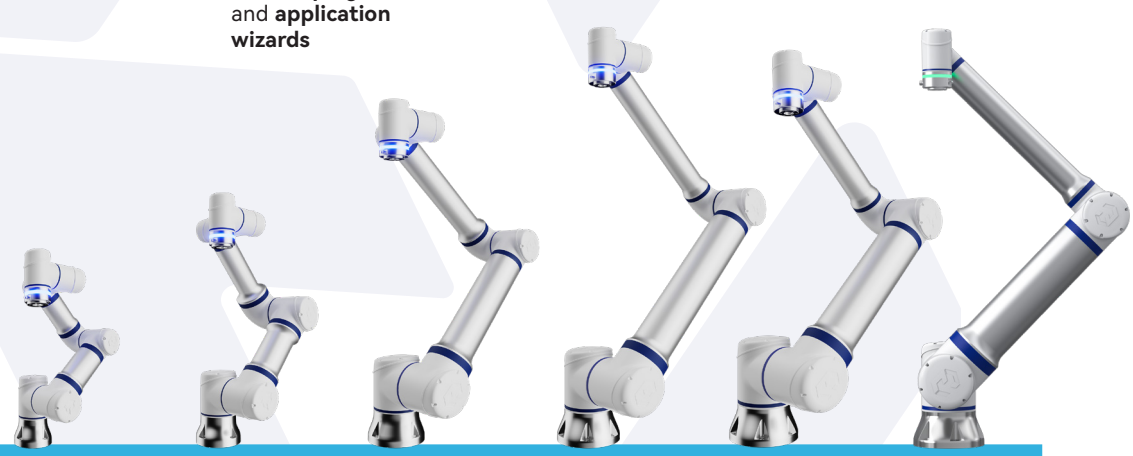
Collaborative Robots Line

Enhanced Safety
31 safety functions (PL d Cat. 3 for SF01-SF30; PL b Cat. 1 for SF31)

Graphic Programming with expandable UI supporting **custom plugins** and **application wizards**

Greater Openness
Compatible with multiple protocols. **PNP-NPN switch mode**

High Ingress Protection
Standard **IP65** (optional **IP68**)

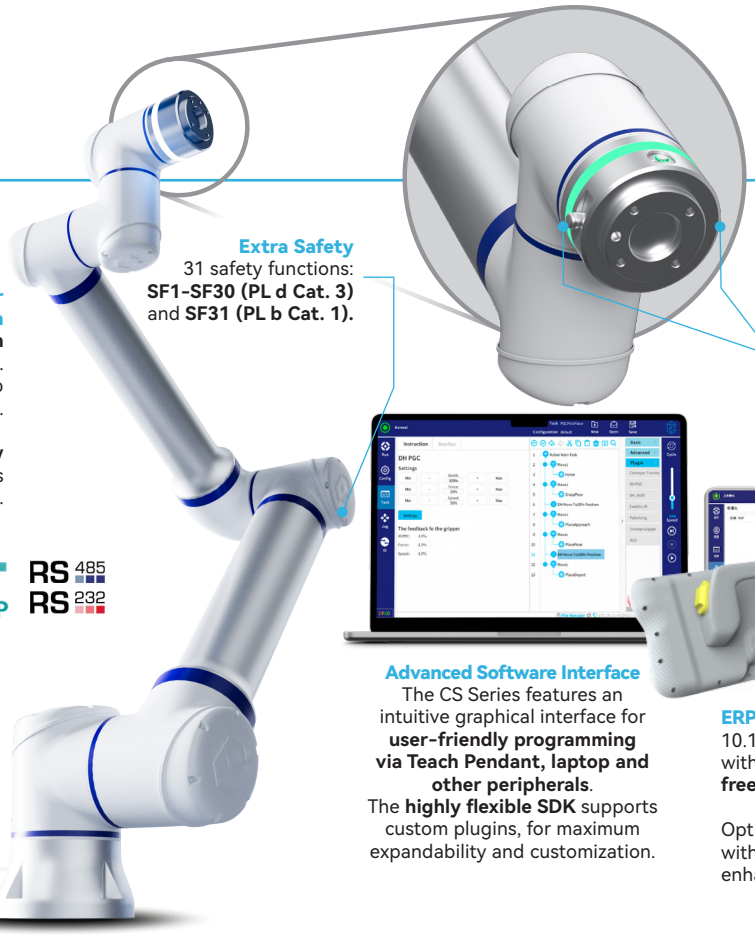


	CS63	CS66	CS612	CS620	CS625	CS530H*
Payload	3 kg / 6.6 lb	6 kg / 13.2 lb	12 kg / 26.4 lb	20 kg / 44 lb	25 kg / 55.1 lb	30 kg / 66.1 lb
Radius	624 mm / 24.5 in	914 mm / 35.9 in	1304 mm / 51.3 in	1800 mm / 70.8 in	1500 mm / 59 in	1522 mm / 59.9 in
Repeatability	±0.02 mm	±0.03 mm	±0.05 mm	±0.1 mm	±0.08 mm	±0.1 mm
TCP Speed	2.0 m/s	2.8 m/s	3.4 m/s	3.9 m/s	3.3 m/s	4.0 m/s

ISO 13849, ISO 10218 | UL, CE, KCs | ISO 14644 cleanroom class 5, RoHS | SEMI-S2

** The CS530H robotic arm can only be supplied as part of the CP series palletizing solution.*

Highlights



Extra Safety
31 safety functions: **SF1-SF30 (PL d Cat. 3)** and **SF31 (PL b Cat. 1).**

High output capacity for EOAT
Standard 8-pin connector with **capacity up to 3A**. Additional 4-pin connector **up to 5A for ≥20 kg (44 lb) payloads**.

Highly Expandable Controller with mini OEM option
24 DI (8 config.) with **PNP and NPN switch mode** / 24 DO (8 config.). It supports **HDMI® 2.1** for transmissions up to 8K@60Hz.

Optional mini OEM controller with **very low weight and compact dimensions** for users who want to create their own custom design.

PROFINET | EtherNet/IP | Modbus | FINS TCP | RS 485 | RS 232

HDMI 2.1



Advanced Software Interface
The CS Series features an intuitive graphical interface for **user-friendly programming via Teach Pendant, laptop and other peripherals**. The **highly flexible SDK** supports custom plugins, for maximum expandability and customization.

ERP500/500S Teach-Pendant
10.1" detachable Teach Pendant with rear button for convenient **free-drive programming**.

Optional version (**ERP500S**) with **3-modes enable key** for enhanced safety.

CP SERIES

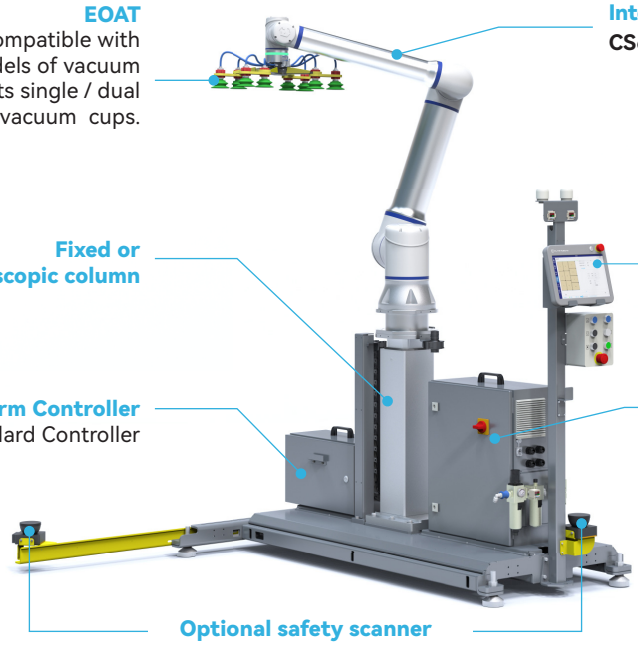
All-in-1 Collaborative Palletizing Solution

With a **maximum payload of 30kg (66.1 Lbs)** and a **stacking height of up to 2600mm (102.3 in**), the Elite Robots **CP** (**Collaborative Palletizer**) **Series** is ready to streamline your end-of-line operations. Ensuring a **fast installation** just right of the box, this **cost-effective, safe and easy to use** (no programming skills required) **modular palletizing solution** can accommodate diverse payloads and pallet heights and easily adapt to different customer requirements.

High Payload
Up to **30 Kg / 66.1 Lbs**

High Stacking Height
Up to **2600 mm / 102.3 in**

Up to 20 Boxes/Min
with dual vacuum cup

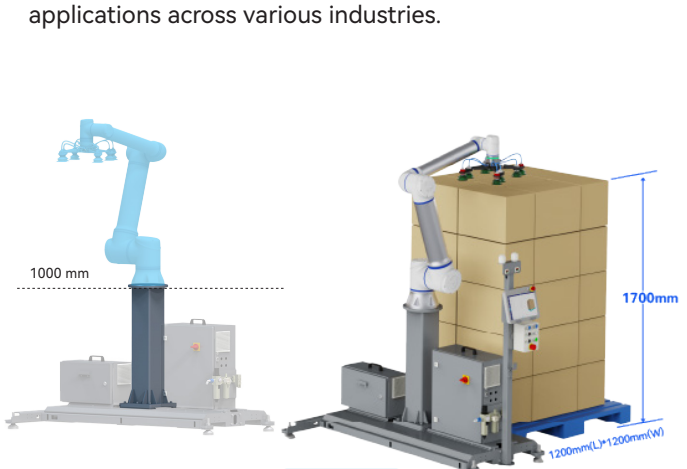




The CP Series in dual-cup mode

Fixed or lifting base column

The combination of the 3 cobot arms with the two alternative base columns (**CPF= Fixed Column**; **CPL= Lifting Column**) offers a rich selection of variants capable of handling **payloads between 20-30kg (44-66.1 Lbs), pallets up to 1200mm (47.2 in) in length/width** and **stacking height up to 2600mm (102.3 in)**. This makes the CP Series ideal to support applications across various industries.



CPF10



CPL07

CW SERIES

Welding Solution with Copilot

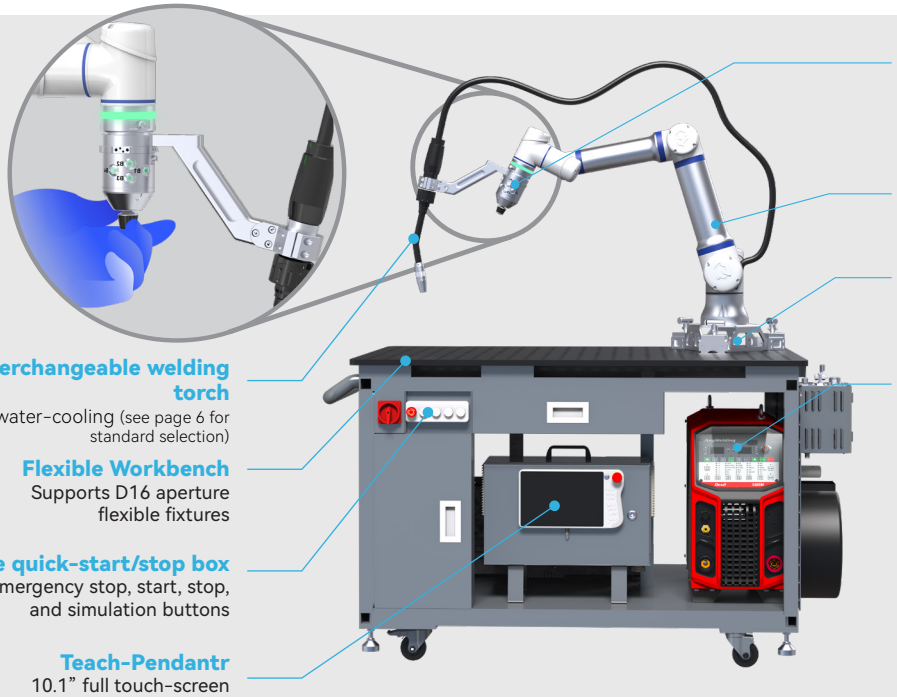
Elite Robots **CW (Collaborative Welder) Series** is a flexible, compact and modular solution which combines **Elite Robots proprietary hardware and software** with the **welding equipment from first-class manufacturers**. Easy to install and fast to deploy and redeploy, the CW series is perfectly suited to different types of production, from large-scale to HMLV manufacturing, and industrial sectors.

Optional Copilot
The Elite Robots proprietary piloting tool enables easy programming of the weld trajectory in any direction (x-y-z)

Modular Design
Interchangeable welding machine and torch. Supports multi-station and other configuration types.

User-friendly
Easy to program thanks to the embedded proprietary welding application wizard. Supports additional expansion.

Interchangeable Welding HW
350A/500A machines; air/water-cooled torches.



Interchangeable welding torch
Air/water-cooling (see page 6 for standard selection)

Flexible Workbench
Supports D16 aperture flexible fixtures

Movable quick-start/stop box
Emergency stop, start, stop, and simulation buttons

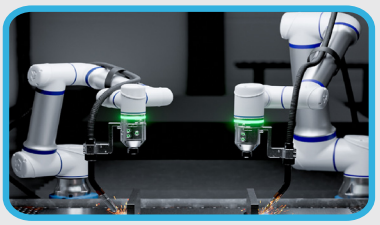
Teach-Pendantr
10.1" full touch-screen

Welding Copilot
Optional Elite Robots proprietary tool for manual planning of the welding trajectory

Collaborative Robots
CS66 | CS612 | CS620

Magnetic Base
Supports flexible multi-angle installation.
- Max pull-off force per magnet: **180 kgf**
- Shear force per magnet: **36 kgf**

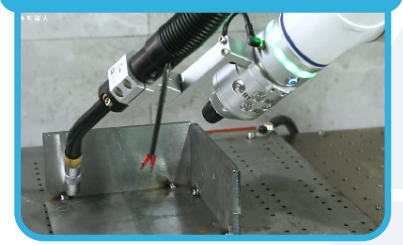
Interchangeable welding machine
350A/500A options (see page 6 for standard selection)



The modular design supports multi-station and other configuration types

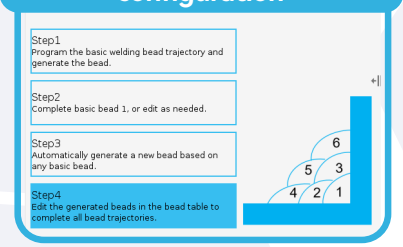
Automatic programming and other user-friendly features

Touch-sensing

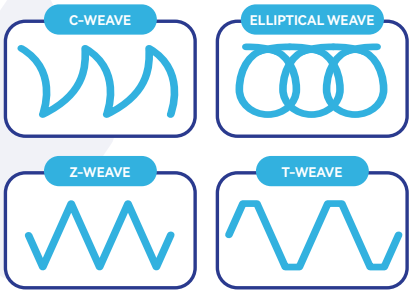


Touch-sensing function for auto-adjustment of the weld trajectory

Easy multi-layer configuration



Automatically generates each subsequent step based on the programmed offset of the first step

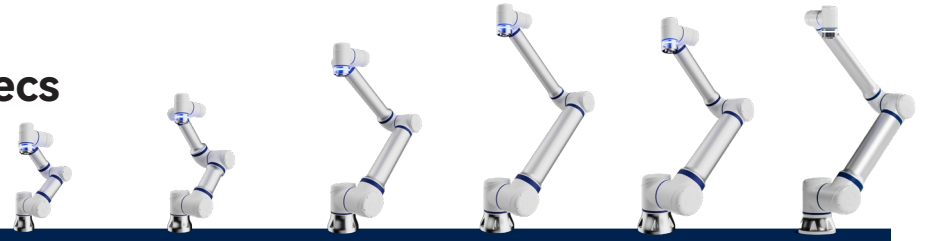


4 weaving modes: C-weaving, Elliptical weaving, Z-weaving, and T-weaving

Compatible welding brands include:

AOTAI · MEGMEET · Fronius · LINCOLN ELECTRIC · KEMPPI · ewm · ESAB · GYS · Miller · MERLE · SynerBot · ...and more

CS Series Specs



Robot arm

		CS63	CS66	CS612	CS620	CS625	CS530H*
Payload		3 kg / 6.6 lb	6 kg / 13.2 lb	12 kg / 26.4 lb	20 kg / 44 lb	25 kg / 55.1 lb	30 kg / 66.1 lb
Radius		624 mm / 24.5 in	914 mm / 35.9 in	1304 mm / 51.3 in	1800 mm / 70.8 in	1500 mm / 59 in	1522 mm / 59.9 in
Repeatability		±0.02mm	±0.03mm	±0.05mm	±0.1mm	±0.08mm	±0.1mm
Axis		6					5
Joints rotation	J1-J3	±360°	±360°	±360°	±360°	±360°	±360°
	J4	±360°	±360°	±360°	±360°	±360°	-
	J5	±360°	±360°	±360°	±360°	±360°	-
	J6	±360°	±360°	±360°	±360°	±360°	±360°
Joints speed	J1-J2	180°/s	150°/s	120°/s	125°/s	125°/s	125°/s
	J3	230°/s	180°/s	150°/s	150°/s	150°/s	150°/s
	J4	230°/s	230°/s	180°/s	210°/s	210°/s	-
	J5-J6	230°/s	230°/s	180°/s	210°/s	210°/s	210°/s
Max TCP Speed		2.0 m/s	2.8 m/s	3.4 m/s	3.9 m/s	3.3 m/s	4.0 m/s
IP rating		IP65 (optional IP68)					
Temperature range		-10~50℃ / 14℉~122℉					
Relative humidity		<90% (non-condensing)					
Typical power usage		185w	250w	435w	625w	625w	600w
Mounting		Any orientation					Front/Reverse
Tool I/O connector & supply		M8, 8pin | 0 / 12V / 24V; 3A / 2A / 1A			T1: M8, 8pin | 0 / 12V / 24V; 3A / 2A / 1A T2: Ø 12.8mm, 4pin | 24 V; 5A		
Tool I/O ports & communication		4 config. DI / DO; 1 AI, 1 AO | RS485					
Footprint		128 mm / 5 in	150 mm / 5.9 in	190 mm / 7.4 in	240 mm / 9.4 in	240 mm / 9.4 in	240 mm / 9.4 in
Weight		15 kg / 33 lbs	20 kg / 44 lbs	34 kg / 74.9 lbs	60 kg / 132.2 lbs	58 kg / 127.8 lbs	58 kg / 127.8 lbs
Material		Aluminum, steel, plastic, rubber					
Cable length		5.5 m / 216.5 in**					
Programming		Python-script, graphical proprietary user interface, free-drag/offline programming					

** The CS530H robotic arm can only be supplied as part of the CP series palletizing solution.*
*** Optional cable lengths of 1.5 m (59 in), 3 m (118 in) and 8 m (314.9 in) and additional extensions up to 10 m (393.7 in) are available.*

Controllers





Model	ERB3C300 / ERB3C600 / ERB3C2K0	ERB1C600ME-Mini
Type	Standard AC	DC MINI
I/O ports	16 x DI (PNP/NPN switch), 16 x DO; 8 x CI (PNP/NPN switch), 8 x CO; 2 x AI, 2 x AO, 4 x High-Speed DI	8 x DI, 8 x DO; 8 x CI (PNP/NPN switch), 8 x CO; 2 x AI, 2 x AO
I/O power supply	24V/2A	
Communication	Ethernet TCP/IP, UDP, Modbus TCP/RTU, RS485/RS232, Profinet slave, Ethernet/IP slave, CCLink slave (optional)	Ethernet, Profinet slave, Ethernet/IP slave, FINS TCP, Modbus TCP/RTU, RS485, CCLink slave (optional)
Dim (W x H x D)	505mm × 447mm × 257mm	164.2mm × 130mm × 72mm
IP rating	IP44	IP20
Weight	13kg * / 15kg **	1.5 kg
Power source	100-240 VAC, 50-60 Hz	45~55VDC
Operating Temperature	ERB3C300 / ERB3C2K0: 0°C~50°C ERB3C600: -10°C~50°C	-10°C~50°C
Ambient humidity	90%	
Material	Aluminum alloy, Steel	

Teach Pendants





Model	ERP500 (standard)	ERP500S (optional)
Dim (W x H x D)	304mm x 169mm x 93mm	
Resolution	1280 x 800	
Screen size	10.1“	
Front buttons	12 motion-control buttons; 2 speed-adjustment buttons	
Rear button	Free-drive programming	3-position enable key
IP rating	IP54	
Weight	0.96 kg	
Cable length	5.5 m	
Operating temperature	-10°C~50°C	
Ambient humidity	95%	
Material	Aluminum alloy, plastic, silicone rubber	

* For cobots: **CS63 - CS66 - CS612** | ** For cobots: **CS620 - CS625 - CS530H**

CP Series Specs

Base	Arm	Payload	Max Pallet Size (W x L)	Max Stacking Height
CPF10	CS620	20 kg / 44 lbs	1200 mm x 1200 mm 47.2 in x 47.2 in	1700 mm / 66.9 in
	CS625	25 kg / 55.1 lbs	1200 mm x 1000 mm 47.2 in x 39.3 in	1600 mm / 62.9 in
	CS530H	30 kg / 66.1 lbs	1200 mm x 1000 mm 47.2 in x 39.3 in	1600 mm / 62.9 in
CPL07	CS620	20 kg / 44 lbs	1200 mm x 1200 mm 47.2 in x 47.2 in	2600 mm / 102.3 in
	CS625	25 kg / 55.1 lbs	1200 mm x 1000 mm 47.2 in x 39.3 in	2300 mm / 90.5 in
	CS530H	30 kg / 66.1 lbs	1200 mm x 1000 mm 47.2 in x 39.3 in	2300 mm / 90.5 in



CPF10



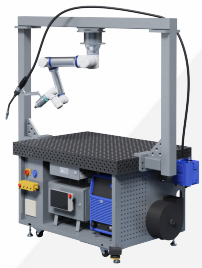
CPL07

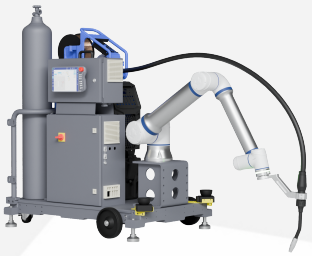
Performance & Common Specs

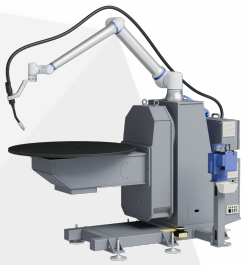
Max Speed	10 boxes/min (single vacuum cup) 20 Boxes/min (dual vacuum cup)
Operating Temperature	0~50℃ / 32°F~122°F
Peak Power Consumption	2~3.5kW
Power Source	Single-phase 220VAC/110VAC 50~60Hz
Footprint	1400mm x 1700mm / 55.1 in x 66.9 in

CW Series

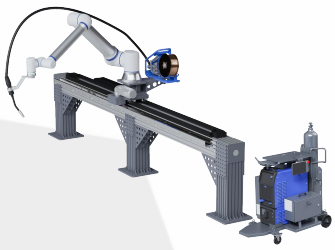












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