



TIANJI ROBOT - EVO

The TIANJI EVO series, inspired by EVOLUTION, features high-speed, high-protection, and high-precision robots. The series offers a comprehensive upgrade from the robot body to the control system, enhancing speed, precision, and efficiency. With a reach range from 565mm to 1825mm and a payload capacity from 4kg to 25kg, it boasts top protection levels—IP67 for the robot and IP65 for the control cabinet, ensuring it's waterproof, dustproof, and resilient in harsh environments. Equipped with the Tianji Fusion control system, it reduces programming and training costs, simplifying complex path applications for quicker and more accurate execution.

- 01

Speed Reigns Supreme,Elevating Production Efficiency Dramatically

The EVO series, among all of TIANJI's product lines, boasts the highest speed, enhancing overall production efficiency for customers. Catering to a wide range of customer needs, the performance upgrade begins with the utilization of the high-speed EVO robots. With a standard cycle time of just 0.35 seconds, the EV04 sets the benchmark.
- 02

Resilient in Harsh Environments, Body IP67 + Control Cabinet IP54 Protection Level

EV04 to EV010L boast an IP67 rating for the body, Special treatment enhances wear and corrosion resistance in the wrist. Multiple protections on the J4 joint prevent foreign object intrusion and effectively block joint medium contamination. The control cabinet, rated IP54, safeguards the 'smart brain' comprehensively in harsh environments.
- 03

Simplified Programming for Complex Path Applications,Process Parameter-Oriented Programming

Robots can navigate complex paths quickly and precisely, especially when executing intricate curved trajectories. With our exclusive FCC programming language, they handle complex route programming with ease. This technology is applicable not just for basic tasks like handling, assembly, inspection, and palletizing, but also significantly reduces training costs and enhances product quality in more complex applications such as polishing, gluing, spraying, and laser welding.

Application case

Auto Parts

Relay piston CNC machining and loading/unloading
model number :EVO7L

Auto Parts

Reflow piston CNC machining and loading/unloading
model number :EVO7L

3C

Floor-mounted keyboard stamping loading and unloading
model number :EVO25

3C

High-precision adhesive track detection
model number :EVO4

Electronic Cigarette

E-cigarettes - E-cigarette Testing and Packaging
model number :EVO7L/SR6

Foodstuffs

Food - Beer Soft Bag Handling
model number :EVO7L

Processed

S-shaped workpiece engraving
model number :EVO12

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TIANJI ROBOT BROCHURE - EVO SERIES

EVOLUTION

GUANGDONG TIANJI INTELLIGENT SYSTEM CO.,LTD.

Parameters of the control cabinet

Name	Specification	
Model	FiRC-CB	FiRC-LB
Protection class	IP54	
Boundary Dimension*3	339×280×139mm	550×410×390mm
Gross weight	9kg	37.5kg
Cooling method	Air cooling	
Pow er Source Specifications	MB:Simplex AC220/230V (+10%~-15%)/50/60Hz (±2%) LB:EVO12/Simplex AC220/230V/50/60Hz EVO25/Three phase AC380V/50/60Hz	
Grounding	Working grounding (grounding resistance below 100Ω) dedicated grounding	
Noise level	Below 60dB	
Input and output signal	Universal signal input 16, output 16 (expandable)	
Interface	EtherNet/EtherCat	
	Modbus TCP	
Position control method	Optional analog interface, encoder interface, RS485 interface, etc.	
	Absolute encoder	
Addition and subtraction control method	Software Servo Control	Software Servo Control
Drive unit	AC private server	

Appearance of the control cabinet

FiRC-CB

FiRC-LB

Teach Pendant Parameters

Name	Specification
Material	Reinforced plastic (with rubber handle)
Boundary Dimension	274×207×116mm (no protrusions)
Gross weight	1.2kg
Protection class	IP54
Display Screen	8-inch TFT color LCD (800×600) ; 4-wire resistive touch screen
Operate the machine	Three-position enable switch, emergency stop button, indicator light, mode switch
	Switch in Keyless Mode
Cable length	The teach pendant ships with 1 touch pen
	Standard: 6.3M, longest: 10M (customized)
Other	USB Port (USB2.0) ×1

Appearance of teaching pendant

