

I-Series Robot

Payload	5Kg	Weight	< 24kg	Weight-to-payload Ratio	<4.8	
Degrees of Freedom	6	Repeatability	±0.1mm	Reach	922mm	
Linear Velocity of End Effector	≤1.0 m/s	Communication	CAN Bus	Cable to connect control box	5m	
Power Supply	DC 48V	Power Consumption	200W (General)	Body Material	Aluminium Alloy	
Ambient Temperature	0~45°C	Ambient Humidity	30~85% (No Condensation)	IP Classification	IP54	
Joint ranges Max Speed	J1	± 175°	150°/s	Endeffector I/O	DI	2
	J2	± 175°	150°/s		DO	2
	J3	± 175°	150°/s		AI	2
	J4	± 175°	180°/s		AO	0
	J5	± 175°	180°/s		Power Input	12V or 24V (Option)
	J6	± 175°	180°/s		Power Output	1A

Control Box

Dimensions (L*W*H)	683*220*671 mm	Internal I/O	DI	24
Weight	20Kg		DO	16
Cable to connect Teach Pendant	4m (Optional)		AI	3
Color	Black		AO	4
Power Supply	100-240VAC , 50-60 Hz		Power Input	24V
IP Classification	IP54		Power Output	3A

- This option is for I-series.

Demonstrator

Dimensions (L*W*H)	350*235*38mm	Color	Orange
Weight	1.8Kg	IP Classification	IP54
Display Screen	12" Resistive LCD Screen		

- This option is for I-series.

Gaitech International Limited

I-Series - Industrial Robots

I-series robots are high quality and low-cost industrial robots, which are developed based on fully modularized design. The robots can be configured from 4 to 7 degrees of freedom according to the needs of users.

I-series robots adopt open source software architecture, which is convenient for users and developers to integrate existing software and algorithms. Compared with the industrial robots with similar features and payloads, I-series robots features compact mechanical design, light weight, high accuracy, and easy installation and programming.



Modularization

- Users can configure the robotic manipulators with 4 to 7 degrees of freedom.
- The joints and the arm tubes are both modularized, which are easy for installation, repair, and maintenance.

Light-weight

- The weight of an I-series manipulator is less than 20kg.
- The ratio of maximum payload and weight is 1:4.

Openness

- The robots provide application program interfaces.
- The hardware adopts bus protocols with open I/O interface extensions.
- The robotic systems support Robot Operating System (ROS).

Safety

- The robots have collision detection function. Thus, guard bars are not required.
- Safety information sensors are embedded in the robots to provide real-time alert for dangerous situations.
- Emergency stop buttons are designed for teach pendants and control boxes.
- Emergency brake distance of the robots is less than 1mm.

Easy operation

- The robotic system provides graphic user interface, which enables online programming and simulation.

Intelligence

- The software system is based on cloud platform management, which realizes remote maintenance, fault diagnosis, and online upgrading.
- Vision systems are integrated in the controllers, which can provide artificial intelligent processing.

Investment and reward

- It takes only six months to recoup the investment cost.

Product Specifications

