



## GekaCobot10



## GekaCobot SOLUTIONS

GekaCobot Solutions are the robot system that can be deployed quickly. Compared with traditional welding robot solutions, GekaCobot Solutions possess advantages of flexible deployment, broad adaptation, and low cost.



## FEATURES

### 1. Graphical programming

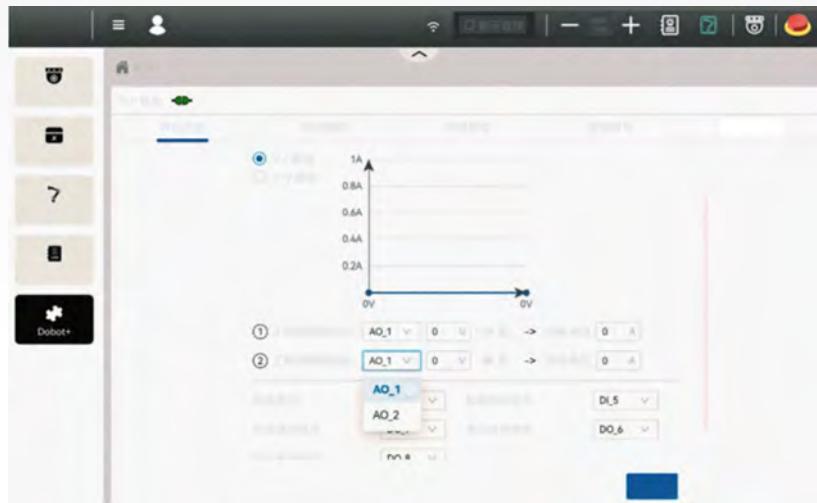
Users can use tablet computers to wirelessly connect, and the operation is simple. Use fast and intuitive graphical operation interfaces to easily complete operations of welder model selection, welding parameter configuration, and teaching programming.



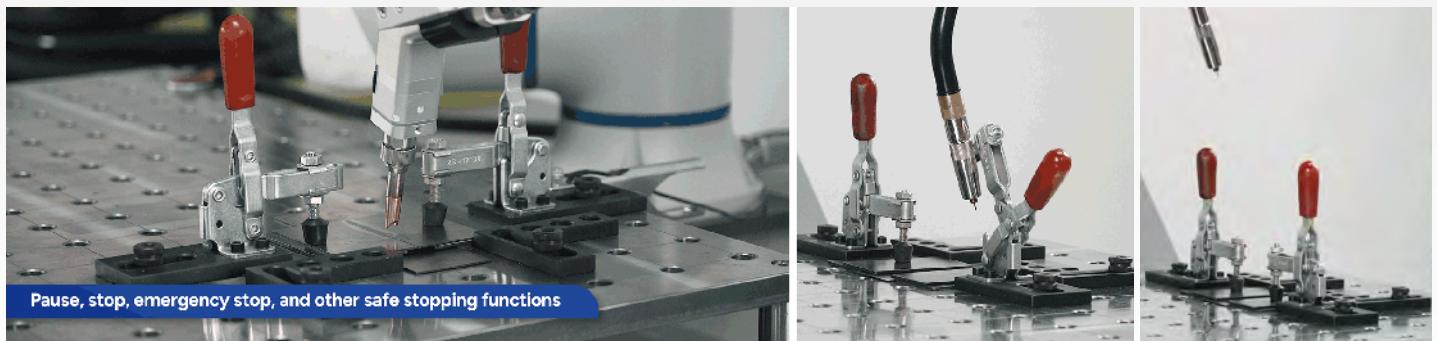
Through the leading full trajectory, the user can drag the robotic arm, quickly generate some positions or trajectories, and then generate various required welding procedures through simple graphical programming.

### 2. Advanced welding process package

The welding process package supports multi-way digital/analog signal and DeviceNet control, which can quickly configure the voltage/current curve, baud rate and switch signals and other parameters. The welding process package can realize direct controls of arc ignition, arc ignition detection, manual wire feeding and withdrawing, and gas inspection to achieve the connection configuration of the robot and welder.

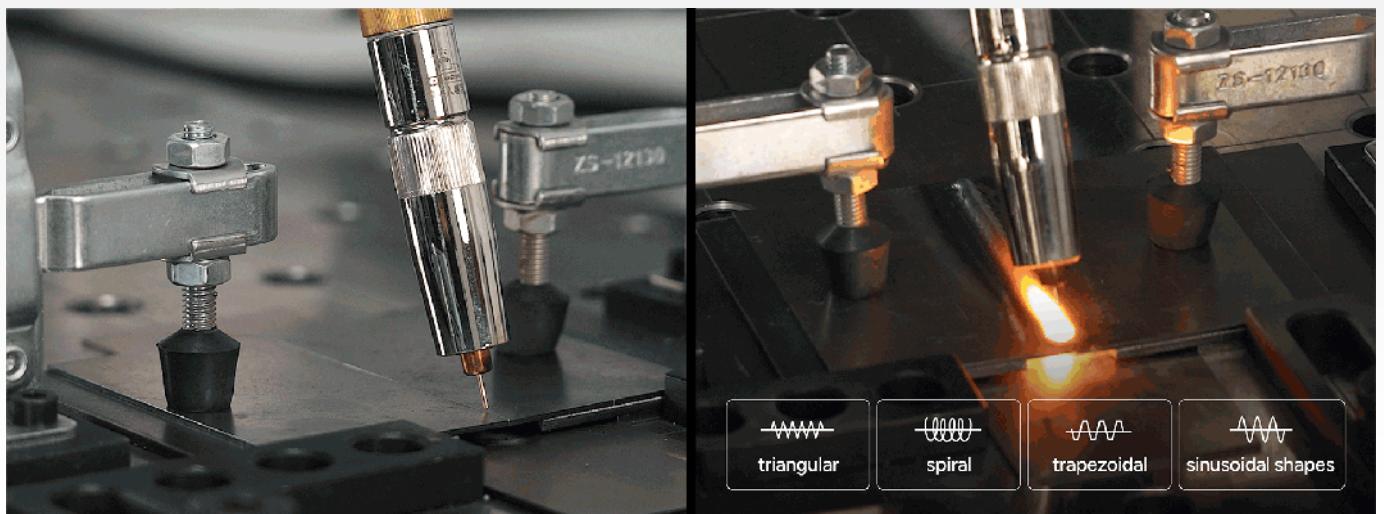


### 3. To ensure safe welding operations to achieve error-free human-robot collaboration



The robotic arm will stop welding in case of emergency stops or pauses. It also supports a collision detection feature, reducing the risk of a dangerous hazardous welding environment.

### 4. To support 5 various weaving patterns to meet diverse welding needs



Welding of GekaCobot Solutions is compatible with linear, triangular, spiral, trapezoidal, and sinusoidal shapes to satisfy rich manufacturing taste.

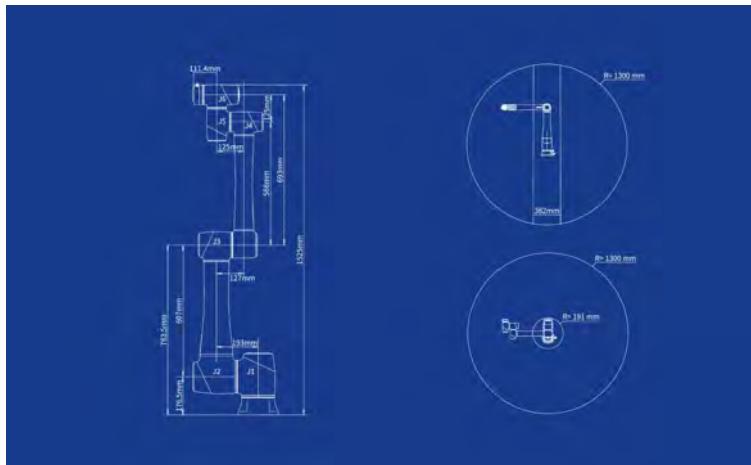
# SYSTEM CONFIGURATION

## 1. GekaCobot

### PRODUCT SPECIFICATIONS

#### GeKaCobot

Model	GekaCobot	
Weight	40 kg	
Maximum Payload	10 kg	
Working Radius	1300 mm	
Max Reach	1525 mm	
Rated Voltage	DC48V	
Maximum Speed of TCP	4 m/s	
Joint Ranges	J1	±360°
	J2	±360°
	J3	±160°
	J4	±360°
	J5	±360°
	J6	±360°
Maximum Speed of Joints	J1/J2	120°/s
	J3/J4/J5/J6	180°/s
End-Effector I/O Interface	DI/DO/AI	2
	AO	0
Communication Interface	Communication	RS485; Devicenet
Communication Interface	DI	16
Controller I/O	DO/DI	16
	AI/AO	2
	ABZ Incremental Encoder	1
Repeatability	±0.03 mm	
Communication	TCP/IP, Modbus, Wi-Fi	
IP Rating	IP54	
Temperature	0°C - 45°C	
Power	350W	
Materials	Aluminum alloy, ABS plastic	



## WELDING POWER SOURCE

### 2. POWER MIG GPS 5000-R



- **Full digital control:** MCU+DSP, precisely control metal transfer
- **Multi-process:** Double MIG/Pulse MIG/CV MIG
- **Welding expert database:** CS/SS/AL/Cu/Ni/FCAW-G
- **Excellent welding seam formation:** twin-pulse function
- **Stable wire feeding:** 4-roll drive + twin closed loops digital control (encoder feedback, 60-line)
- **One-key operation:** save and recall 100 sets of parameters 485/Can/Devicenet/EthernetIP/Ethercat, etc.
- **Abundant digital communication interfaces for robots:** 485/Can/Devicenet/EthernetIP/Ethercat, etc.
- **Fault self-diagnostic function:** intelligent and convenient repair



#### PRODUCT SPECIFICATIONS

<i>Model</i>	<i>POWER MIG GPS 5000-R</i>
Rated input voltage /frequency (V/Hz)	3 phase, AC380V±10%, 50 /60Hz
Rated input capacity (KVA)	29
Rated input current(A)	44
Range of welding current(A)	60~500
Range of welding voltage(V)	17~39
OCV(V)	84
Duty cycle (%)	100
Wire diameter (mm)	Φ1.0, Φ1.2, Φ1.6
Gas flow (L/min)	15~20
Dimension (mm)	660x320x560
Weight (kg /lb)	55 /121.3
Insulation class	H
Protection class	IP23

## ACCESSORIES

### 3. Wire feeder

The GeKaCobot 10 WireFeeder is specially designed for robotic welding systems with small size and light weight.

It adopts the 60-line encoder speed feedback system, which has advantages of high precision of wire feeding, good wire feeding stability, and small influence of wire feeding resistance.



#### PRODUCT SPECIFICATIONS

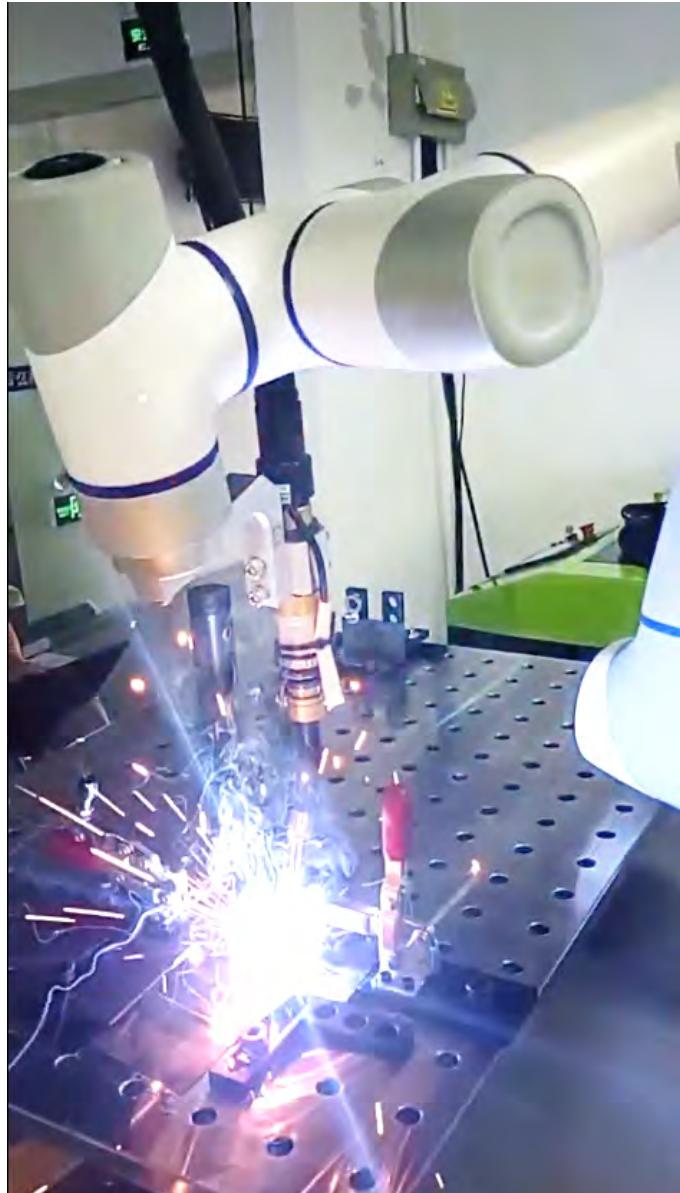
Model	GeKaCobot 10 WireFeeder
Speed	1.5-22mm/min
Wire size	0.8, 1.0, 1.2, 1.6
Method	Four-wheel drive
Body material	Cast aluminum
Weight	8.2kg
Control method	DC Servo

### 4. Devicenet controller

- Standard communication protocol provides a easier communication because cobot and welding machine
- Light and handy structure design offers a easy installation and connection with welding machine
- Standard interface design, easy to install and use



## INDUSTRY APPLICATIONS





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