

Enjoy
Robots
World.



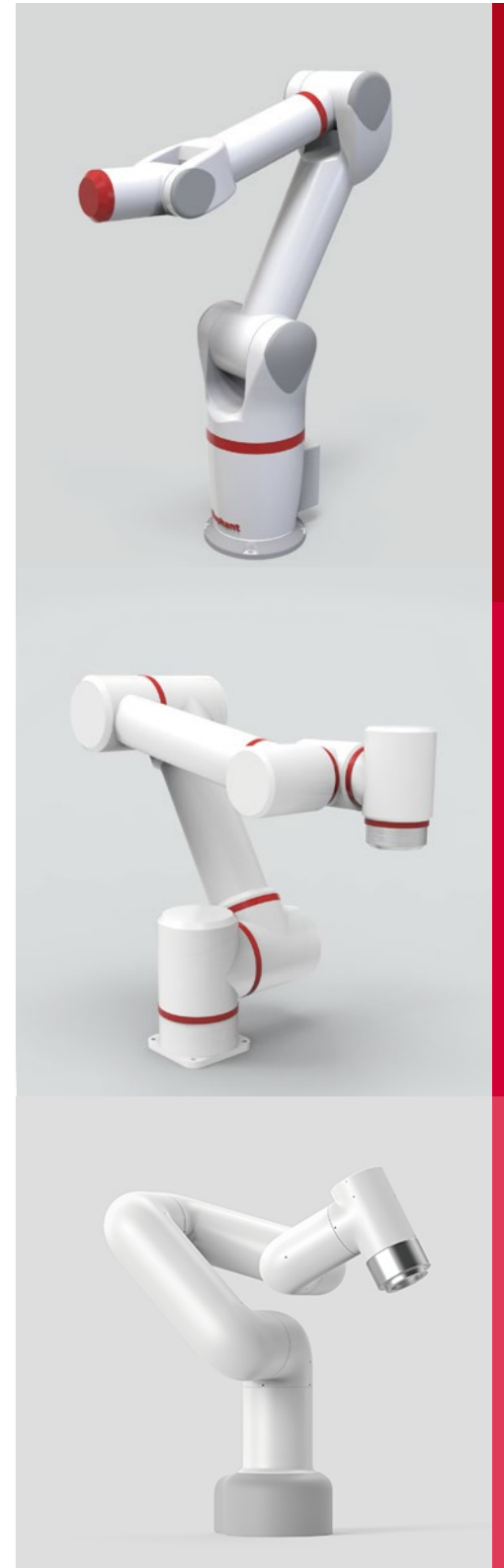
Shenzhen Headquater

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CATALOG

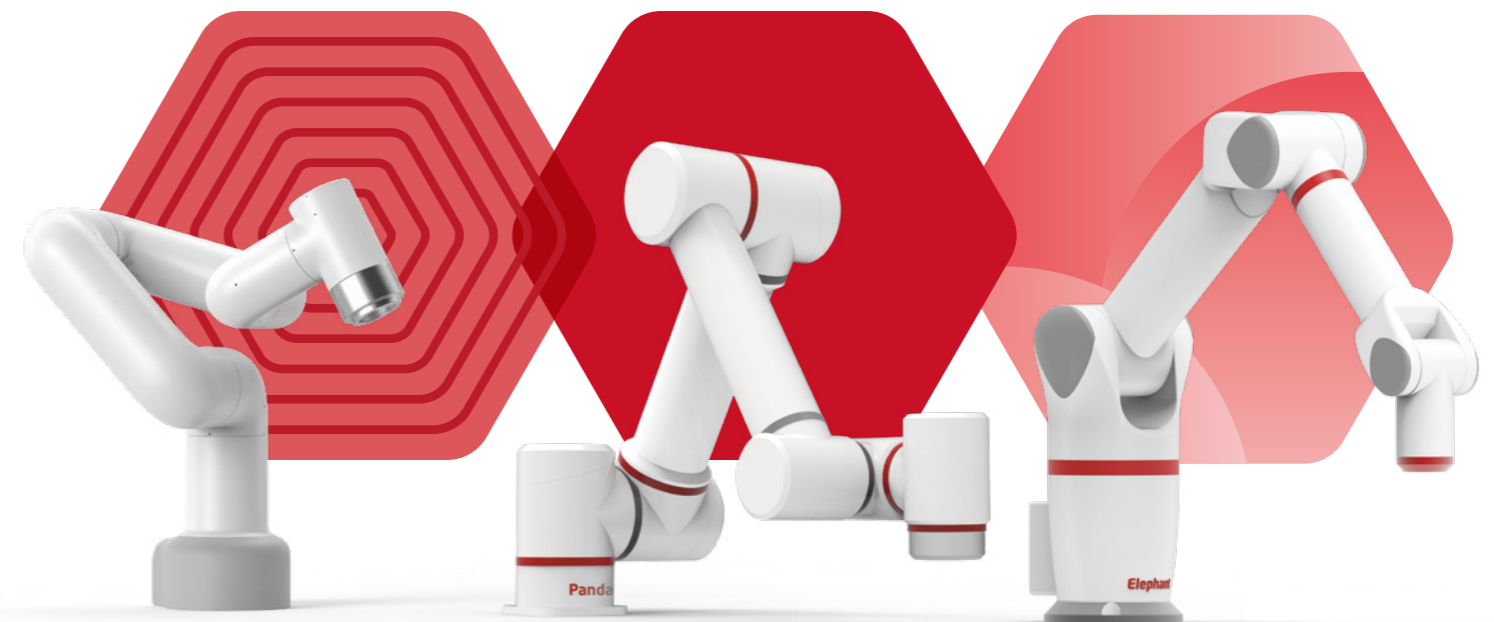
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About Us

Elephant Robotics is a technology firm set foot in Shenzhen China, specializing in the design, development, and production of robotics and automation solutions.

We are committed to providing highly flexible collaborative robots, better operating system "RoboFlow" and customized intelligent automation solutions for industrial manufacturing, commercial purpose, robotics education, and scientific research.

Elephant Robotics is on mission to "Enjoy Robots World", advocating the collaboration in human and robot. With the assistance of robots, we will be able to create a better future!



Family of Elephant Robotics



Elephant 5

A Brand-Step for Industries

- Durable
- Precise
- Innovative

For high-precision and high quality industrial application



Panda 3/5

Versatile Assistant, Safe Helper

- Universal
- Agile
- Cost Effective

For comprehensive industrial application and commercial scenario



Catbot

Small Body, Big Dream

- All-in-One
- Voice Control
- Cloud Programming

For commercial purpose and scientific research

Main Features

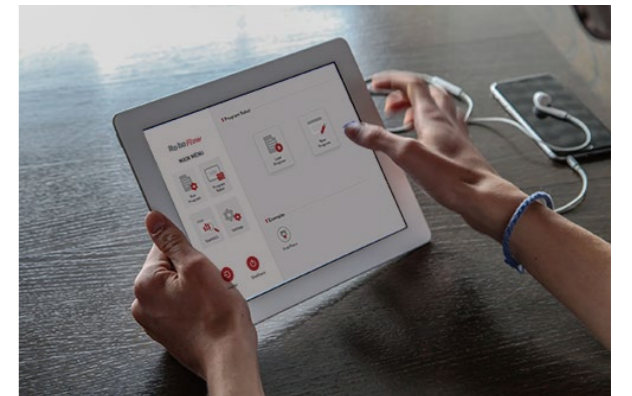
Collaborative and Safe

Based on the efficient and exact collision detection algorithm, products of Elephant Robotics can stop immediately when the slight collision is perceived. No need to install a protective barrier. Safety of personnel is guaranteed. Customized protection units are also accepted, such as Lidar, Light Curtains, etc.



Easy Programming and Universal

Products of Elephant Robotics are using the same operating system "RoboFlow" developed by ourselves, which is universal and easy to operate smoothly. What's more, the interface is simple and clear. Even a novice can quickly learn how to program. It also supports custom programming and secondary development.



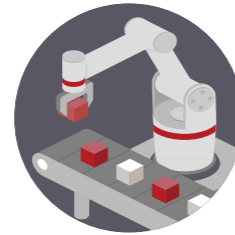
Modular Design and Flexible

Adopted with modular design with few spare parts and low maintenance cost. Our robot is lightweight, space-saving, and easy to re-deploy to multiple applications without changing your production layout. You can quickly replace its end effector according to work requirements.

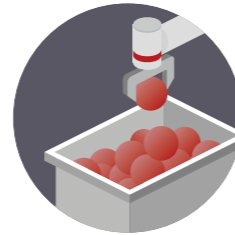


Applications in Industries

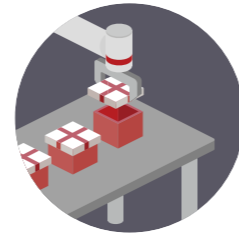
Elephant and Panda series robots provide high flexibility automation solutions to industries. They can be applied to various automation processes, helping industries to improve their productivity, quality and safety level.



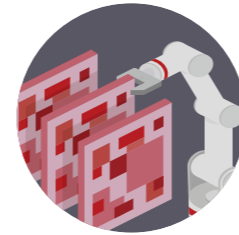
Pick and Place



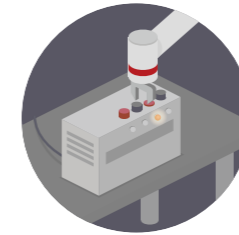
Handling



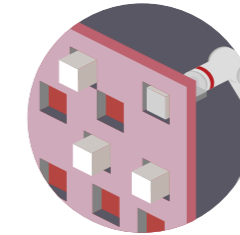
Packaging



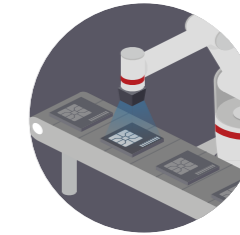
Randomly Picking



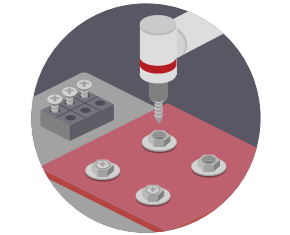
Control



Assembly



Testing



Installation

Widely Applied in Industries

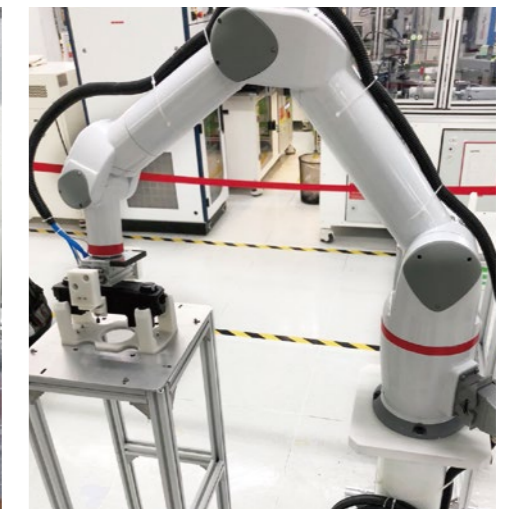
Make sustainable manufacturing much safer, quicker, and more efficient.



Pick and Place



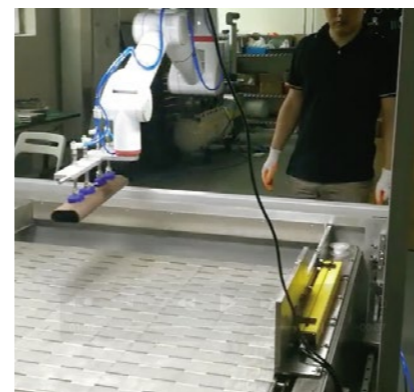
Pick and Place



Testing



Handling



Handling



Assembly



Assembly

Applications in Commerce and Education

Elephant Robotics is committed to bring robots to everyone, our robots are popular in commerce and education, especially the latest Catbot, which is designed for commercial purpose and scientific research. Perfect assistant in various situations, helps your business and research perform efficiently!

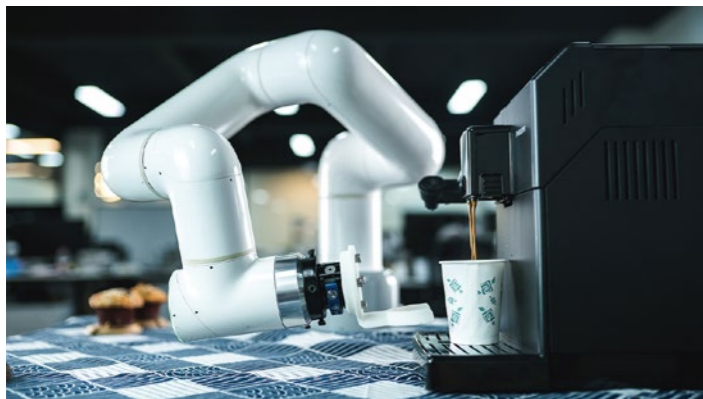
• Perfect helper in Photographic Studio



• Great Demo in Study



• Smart Barista to Enlarge Your Business



• Your Personal Senior Massagist



• Helpful Assistant in Workshop



• Public Spotlight



• Creative Painter to Surprise You



More applications could be customized according to your innovation!



Elephant 5

A Brand-Step for Industries

- Durable
- Precise
- Innovative

For high-precision and high quality industrial application

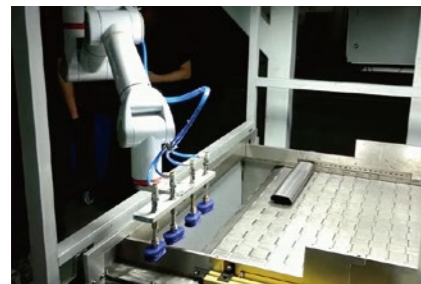
Elephant 5 features a payload of 5kg, a working radius of 810mm and repeatability of $\pm 0.05\text{mm}$, it is a perfect robotic assistant for industrial manufacturing. With high precision and high flexibility, Elephant 5 can do some delicate work conveniently. What's more, Elephant 5 has a certain degree of rigidity because of its unique symmetrical structure. It can even complete the work done by some traditional industrial robots.



—
 Payload: 5KG
 Working Radius: 810mm
 Position Repeatability: $\pm 0.05\text{mm}$

Durable and Precise

High performance components installed



Stable and Rigid

Unique structure-symmetrical on both sides



Innovative

Innovative design, independent R&D



Panda 3/5

Versatile Assistant, Safe Helper

- Universal
- Agile
- Cost Effective

For comprehensive industrial application and commercial scenario

The Panda series is the universal 6-axis collaborative robot developed by Elephant Robotics. It comes with a strong versatility, collaboratively and openness. It features two models with payloads of 3kg and 5kg, respectively. The Panda series is designed to cater to the automation needs of different industries and scenarios.



—
 Payload: 3/5KG
 Working Radius: 550mm/850mm
 Position Repeatability: $\pm 0.05\text{mm}$

Universal

Wide range of applications, can easily meet the automation requirements



More Agile

Ingenious structure design, $\pm 360^\circ$ working range



Cost Effective

High performance with competitive price



Catbot

Small Body, Big Dream.

- All-in-One
- Voice Control
- Cloud Programming

For commercial purpose and scientific research

Catbot is the latest All-in-one 6-axis collaborative robot from Elephant Robotics, aiming for the perfect assistant in commercial scenarios and scientific research. The Catbot integrates the cabinet controller and the robotic arm successfully tackles the problem of oversize cabinet controller for the very first time. With a modular and compact body, as well as a limited number of components, Catbot can save you tons on maintenance costs. This versatile robotic arm features a store with up to 20 hands-on robotic skills, it also supports custom programming and secondary development.



Payload: 3KG
Working Radius: 600mm
Position Repeatability: ±0.05mm, ±0.2mm(lite)

All in One

Integrates the control cabinet into the robot arm body, only weight 18kg, more portable



Voice Interaction

Voice control, much more convenient






Cloud Programming

Allows anyone to program by using a terminal device (eg.computer,pad,phone)



Overview of Elephant Robotics' Family

Products Series	Products Feature	Recommended Fields
	<p>Durable and Precise: High performance components installed</p> <p>Stable and Rigid: Innovative structure-symmetrical on both sides</p> <p>Payload: 5kg Working Radius:810mm Position Repeatability: ±0.05mm</p>	<p>3C electronics, auto parts assembly, injection molding, metal processing, pharmaceutical and chemical industry</p>
	<p>Universal: Wide range of applications, can easily meet the automation requirements</p> <p>More Agile: Ingenious structure design, ±360°working range</p> <p>Cost Effective: High performance with competitive price</p> <p>Payload: 3/5kg Working Radius: 550mm/850mm Position Repeatability: ±0.05mm</p>	<p>3C electronics, metal processing, scientific research, medical, auto industry and other industries</p>
	<p>All in One: Integrates the control cabinet into the robot arm body, only weight 18kg in total, more portable.</p> <p>Voice Interaction: Voice control and programming, much more convenient</p> <p>Cloud Programming: Allows anyone to program by using a terminal device or computer and easy to share</p> <p>Payload: 3kg Working Radius: 600mm Position Repeatability: ±0.05, ±0.2mm(lite)</p>	<p>Commercial scenario, scientific research, education scenario, medical scenario, showing case scenario etc.</p>



Specifications

Robot Version	Elephant 5	Panda 3	Panda 5	Catbot 3
Payload	5kg	3kg	5kg	3kg
Working radius	810mm	550mm	850mm	600mm
Degrees of freedom	6	6		6
Working range	J1/J4/J6:±180°	±360°		J1: ±360°
	J2/J3/J5:±120°			J2: ±180°
Axis maximum speed	225°/sec	J1/J2/J3: 180°/sec	J1/J2/J3: 150°/sec	J1/J2/J3: 180°/sec
		J4/J5/J6: 208°/sec		J4/J5/J6: 225°/sec
Tool speed	1m/sec	1m/sec		1m/sec
Weight	23kg	17kg	24.5kg	18kg
Position repeatability	±0.05mm			±0.05mm, ±0.2mm(lite)
Dimensions robot base	Φ180mm	123mm×123mm		Φ150mm
Programming mode	Graphical programming			
IP classification	IP42	IP54		IP42
Typical power consumption	260W	160W	260W	180W
Materials	Aluminium alloy, ABS, Rubber	Aluminium alloy, Rubber		Aluminium alloy, PC, Rubber
Operating temperature range	0-50°C			
Collaboration operation	Test in accordance with: EN ISO 13849-1 PL d EN ISO 10218-1: 2011-Clause 5.4.3			
Noise	<70dB			
Robot mounting	Any angle			
Relative humidity	5%-95%			
Interface and openness	See "Controller for Elephant & Panda Series"		SDK(Python, C++, Java), API, ROS	
I/O ports			Digital Input:12	
			Digital Ouput:8	
Tool I/O ports			Digital Input:3	
			Digital Ouput:3	
I/O power supply			24V 2A	
Communication			TCP/IP	
Power supply			DC 48V, 10.5A DC 24V, 4.5A	



Controller for Elephant & Panda Series	
Size (L×W×H)	545mm×285mm×433mm
Weight	25kg
Power supply	AC 110-240V, 50-60Hz
IP classification	IP40
Certificate	CE certificate
Interface and openness	SDK(Python, C++,Java),API,ROS
I/O ports	Digital Input: 16 Digital Ouput: 16
I/O power supply	24V 2A
Communication	TCP/IP



Teach Pendant for Elephant & Panda Series (Optional for Catbot)	
Size (L×W×H)	255mm×230mm×90mm
Weight	1.8kg
Screen resolution	1024×768
IP classification	IP20
Screen size	10.4"



Power box	
Size (L×W×H)	297mm×200mm×128mm
Weight	6kg
Power supply	AC 110/220V, 50Hz
IP Rate	IP20

Operating System

RoboFlow

The RoboFlow is the main operating system for human-robot interaction. It comes with a user-friendly operation interface, offers functional modules for driving various smart devices and vision systems, and different educational standards. The user-centric software design makes operation training simpler and smoother in robot manipulation.

Main Features

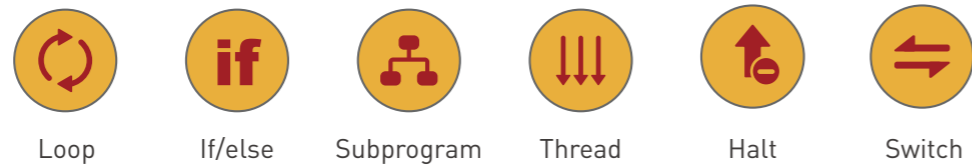
- Adaptive to all visual programming systems for products of Elephant Robotics
- Simple and clear interface, easy and smooth programming experience
- Supports various function modules, processing package is constantly updated
- API can be integrated with any programming language, the SDK includes 3 versions, Python, C++ and Java.
- Supports offline programming and extension on ROS
- Basic algorithms: self research and development, has technical superiority

Program Widget

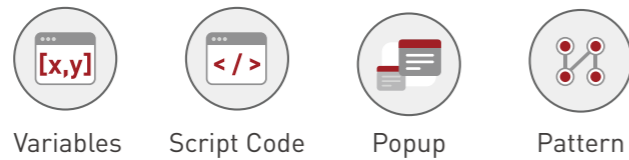
Basic



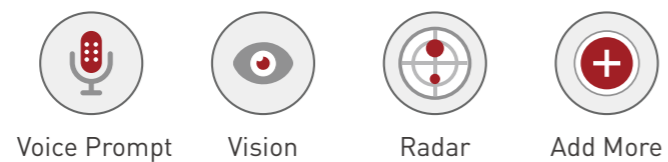
Logic



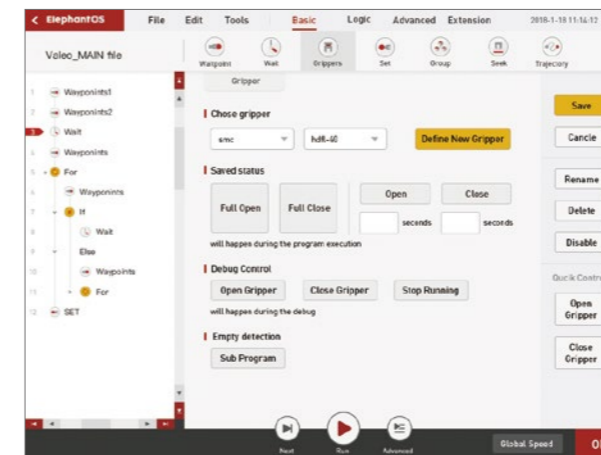
Advanced



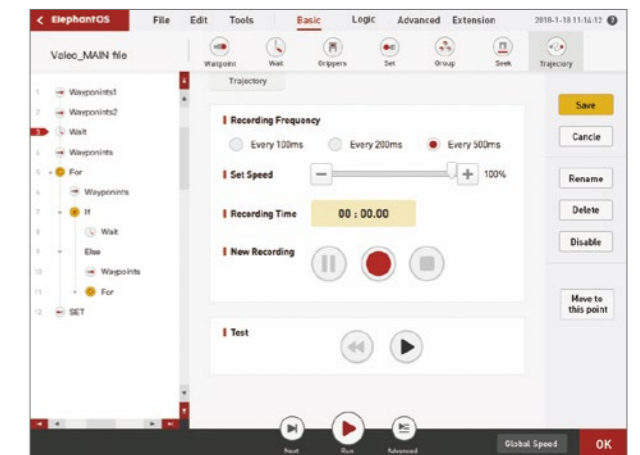
Extention



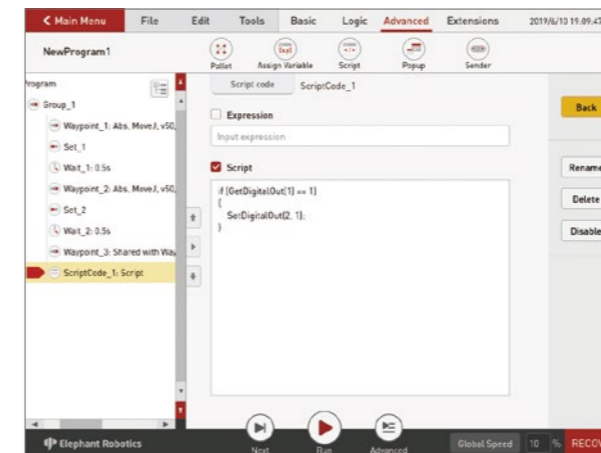
Gripper Function



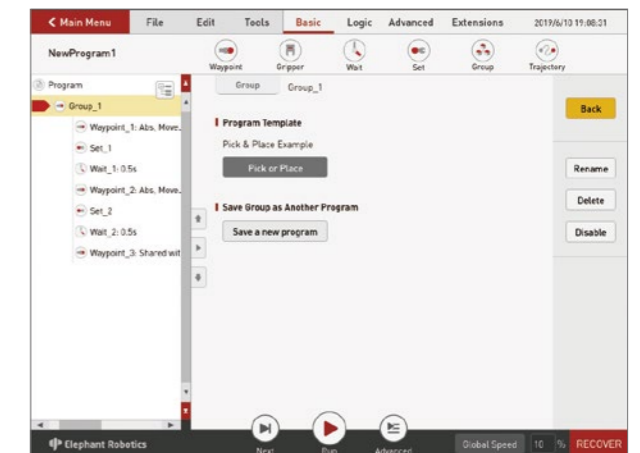
Trajectory Function



Script Code Function



Group Function



End Effector

Products of Elephant Robotics are compatible with different end-effectors and also support third-party extensions, which makes them a flexible mobile automation unit to complete more tasks and increase productivity.



Magnetic Gripper



Suction cup



Polishing Head



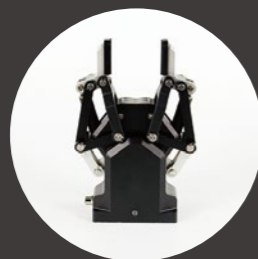
Soft Gripper



Short Range Adaptive Gripper



Electric Screwdriver



Long Range Adaptive Gripper

Solutions

Elephant Robotics offers comprehensive solutions for industries and commerce. By developing fast-to-deploy collaborative robots and comprehensive solutions, we can help our customers to achieve automation in a timely and cost-cutting manner.



3C Electronics

Products of Elephant Robotics are flexible and agile. They can help 3C industry upgrade their production line in an all-round way.



Auto Parts Assembly

Elephant Robotics can upgrade your production line with flexibility and safety, reducing production time and creating industry advantages for you.



Food and Consumer Goods

Elephant Robotics can help your enterprise increase efficiency. With the help of our robots, your staff can do more creative work instead of doing repetitive and boring work.



Small Business

Elephant Robotics provides customized solutions for small business in various conditions. With the help of our robots, you can enlarge your business in a fantastic way.



Machining

Elephant Robotics can help your industry maintain a high level of quality by improving the accuracy of tools and components. The production line will be more productive with the automatic upgrade.



Medical Instrument

Elephant Robotics provides perfect solutions for the pharmaceutical and chemical industry since our robots can perform a variety of tasks.



Education and Scientific Research

Elephant Robotics helps you combine theory and practice in perfection. Our robot can be your intelligent robotic assistant and help you work efficiently.



Household Appliances

Elephant robotics can make you a quality life by helping you free from daily housework and even doing massage for you for instance.

Outstanding Clients

