

Enjoy
Robots
World.



Follow us:
Elephant Robotics

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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 Robotics®P3/5

Versatile Assistant, Safe Helper

- Universal
- Agile
- User Friendly

For comprehensive industrial application and commercial scenario

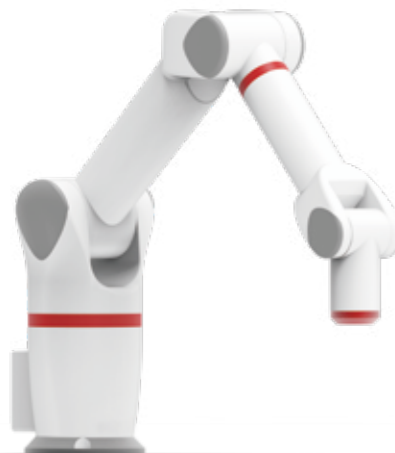


Elephant Robotics®C3

Small Body, Big Dream

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

For commercial purpose and scientific research



Elephant Robotics®E5

A Brand-Step for Industries

- Durable
- Precise
- Innovative

For high-precision and high quality industrial application

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.



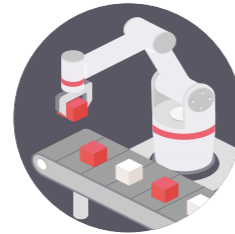
Flexible and Convenient

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.

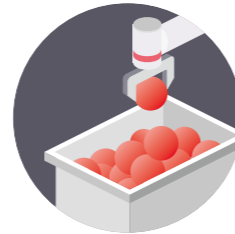


Applications in Industries

Elephant Robotics@P and E 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



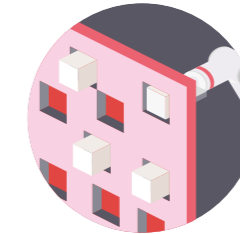
Packaging



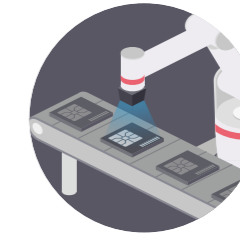
Randomly Picking



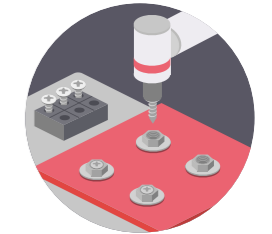
Control



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 Elephant Robotics®C3, 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



• Commercial Display in HUAWEI Eco-Connect Europe



• Public Spotlight



• Smart Barista to Enlarge Your Business



• Your Personal Senior Massagist



• Scientific Research Project with HIT in IROS



• Great Demo in Study



• Helpful Assistant in Workshop



• Creative Painter to Surprise You



More applications could be customized according to your innovation!



Elephant Robotics® P3/P5

Versatile Assistant, Safe Helper

- Universal
- Agile
- User Friendly

For comprehensive industrial application and commercial scenario

Elephant Robotics®P 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 Elephant Robotics®P series is designed to cater to the automation needs of different industries and scenarios.



—
Payload: 3/5KG
Working Radius: 550mm/850mm
Position Repeatability: ±0.05mm

Universal

Wide range of applications, can easily meet the automation requirements



More Agile

Ingenious structure design, ±360° maximum working range



User Friendly

Strong device compatibility and fine system operability



Elephant Robotics®C3

Small Body, Big Dream.

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

For commercial purpose and scientific research

Elephant Robotics®C3 is the latest All-in-one 6-axis collaborative robot from Elephant Robotics, aiming for the perfect assistant in commercial scenarios and scientific research. Elephant Robotics®C3 integrates the cabinet controller and the robotic arm successfully, which 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, Elephant Robotics®C3 can save you tons on maintenance costs. This versatile robotic arm also supports custom programming and secondary development.



—
Payload: 3KG
Working Radius: 600mm
Position Repeatability: ±0.05mm

All in One

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



Cloud Programming

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



Voice Control

Voice control, much more convenient



Elephant Robotics®E5

A Brand-Step for Industries

- Durable
- Precise
- Innovative

For high-precision and high quality industrial application

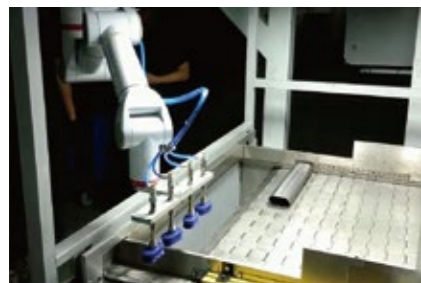
Elephant Robotics®E5 features a payload of 5kg, a working radius of 810mm and repeatability of $\pm 0.05\text{mm}$, it is a perfect robotic assistant for industrial manufacturing. With high precision and high flexibility, Elephant Robotics®E5 can do some delicate work conveniently. What's more, Elephant Robotics®E5 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



Overview of Elephant Robotics' Family

Products Series	Products Feature	Recommended Fields
<p>Elephant Robotics®P Series</p> 	<p>Universal: Wide range of applications, can easily meet the automation requirements</p> <p>More Agile: Ingenious structure design, $\pm 360^\circ$ maximum working range</p> <p>User Friendly: Strong device compatibility and fine system operability</p> <p>Payload: 3/5kg Working Radius: 550mm/850mm Position Repeatability: $\pm 0.05\text{mm}$</p>	<p>3C electronics, metal processing, scientific research, medical, auto industry and other industries</p>
<p>Elephant Robotics®C Series</p> 	<p>All in One: Integrates the control cabinet into the robot arm body, only weight 18kg in total, more portable</p> <p>Cloud Programming: Allows anyone to program by using a terminal device or computer and easy to share</p> <p>Voice Control: Voice control and programming, much more convenient</p> <p>Payload: 3kg Working Radius: 600mm Position Repeatability: $\pm 0.05\text{mm}$</p>	<p>Commercial scenario, scientific research, education scenario, medical scenario, showing case scenario etc.</p>
<p>Elephant Robotics®E Series</p> 	<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: $\pm 0.05\text{mm}$</p>	<p>3C electronics, auto parts assembly, injection molding, metal processing, pharmaceutical and chemical industry</p>



Specifications

Robot Model	P3	P5	C3	E5
Payload	3kg	5kg	3kg	5kg
Working radius	550mm	850mm	600mm	810mm
Degrees of freedom	6		6	6
Working range	J3: ±150°		J3: ±150°	J1/J4/J6:±180°
	J1/J2/J4/J5/J6: ±360°		J1/J2/J4/J5/J6: ±360°	J2/J3/J5:±120°
Axis maximum speed	J1/J2/J3: 165°/sec		J1/J2: 165°/sec	225°/sec
	J4/J5/J6: 180°/sec		J3/J4/J5/J6: 180°/sec	
Tool speed	1m/sec		1m/sec	1m/sec
Weight	17kg	24.5kg	18kg	23kg
Position repeatability	±0.05mm			
Dimensions robot base	123mm×123mm		Φ150mm	Φ180mm
Programming mode	Graphical programming			
IP classification	IP54		IP42	IP42
Typical power consumption	160W	260W	180W	260W
Materials	Aluminium alloy, Rubber		Aluminium alloy, PC, Rubber	Aluminium alloy, ABS, Rubber
Operating temperature range	0-50°C			
Collaboration operation	Test in accordance with: EN ISO 13849-1: 2015 EN ISO 10218-1: 2011			
Noise	<70dB			
Robot mounting	Any angle			
Relative humidity	5%-95%			
Interface and openness	See "Controller for Elephant Robotics®P,E Series"		SDK(Python, C++, Java), API, ROS	See "Controller for Elephant Robotics®P,E Series"
I/O ports			Digital Input:12	
			Digital Output:8	
Power supply Output			DC 24V 1.5A	
I/O ports Output			DC 12/24V 0.2A	
Tool I/O ports			Digital Input:3	
			Digital Output:3	
Tool power supply Output			DC 24V 1.5A	
Tool I/O ports Output			DC 12/24V 0.2A	
Communication			Ethernet/IP USB 2.0	
Power supply	DC 48V, 10.5A	DC 24V, 4.5A		

Controller for Elephant Robotics®P,E 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 Output: 16
Power supply output	DC 24V 1.5A
I/O ports output	DC 12/24V 0.2A
Tool I/O ports	Digital Input: 3 Digital Output: 3
Tool power supply output	DC 24V 1.5A
Tool I/O ports output	DC 12/24V 0.2A
Communication	RS 485, EtherNet/IP USB 2.0



Teach Pendant for Elephant Robotics®P,E Series (Optional for C Series)	
Size (L×W×H)	255mm×230mm×90mm
Weight	1.8kg
Screen resolution	1024×768
IP classification	IP20
Screen size	10.4"



Power Box for Elephant Robotics®C Series	
Size (L×W×H)	303mm×204mm×154mm
Weight	6kg
Power supply	AC 110-240V, 50-60Hz
IP Rate	IP20



Operating System

RoboFlow

RoboFlow is the operating system developed by Elephant Robotics. It comes with a user-friendly operation interface, offers functional modules for driving various smart devices and vision systems. The user-centric software design makes operation training simpler and smoother in robot manipulation. Even a novice can quickly learn how to program. It also supports customized programming and secondary development.

Main Features

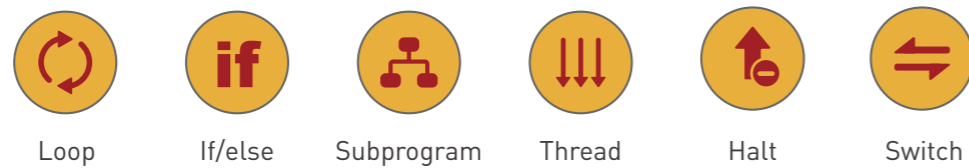
- Adaptive to all visual programming systems for products of Elephant Robotics
- Simple and clear interface, easy and smooth programming experience
- Supports various function modules, processing package is constantly updated
- API can be integrated with any programming language, the SDK includes 3 versions,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

Program Widget

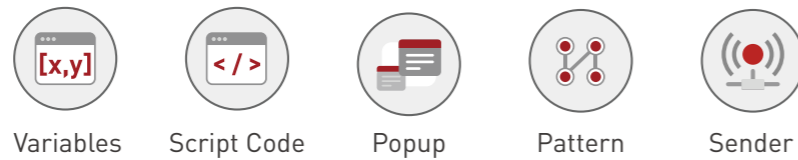
Basic



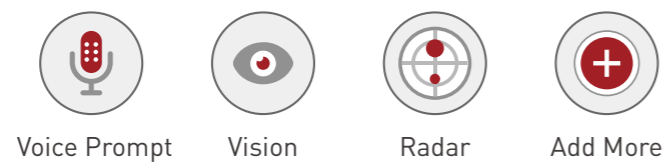
Logic



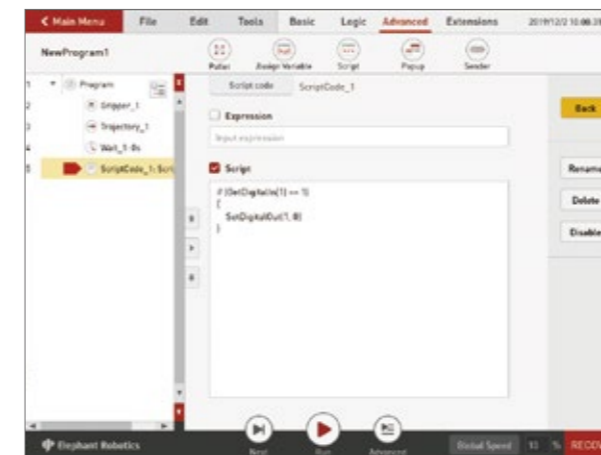
Advanced



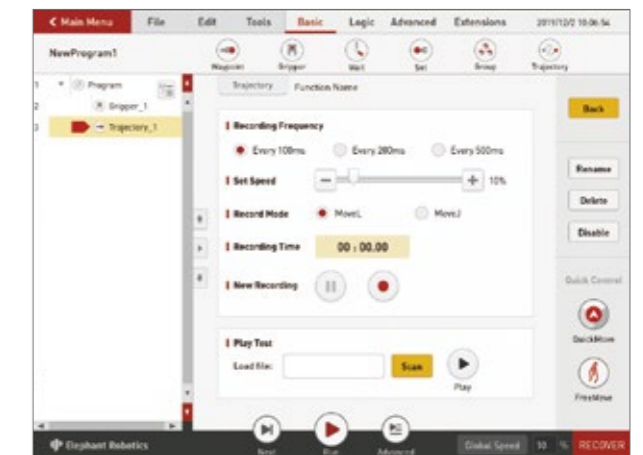
Extention



Script Code Function



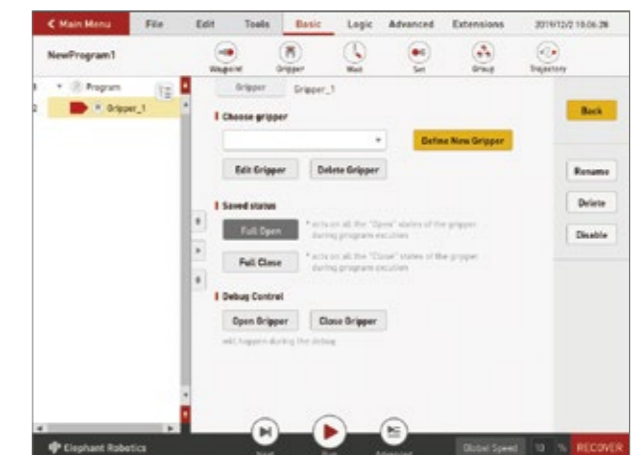
Trajectory Function



Sender Function



Gripper 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



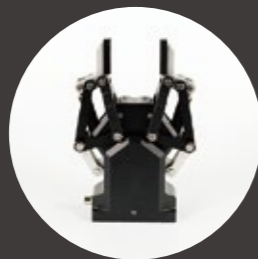
Soft Gripper



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

