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Enjoy Robots World.
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.
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.

Applications in Industries

Widespread Applications in Industries
Make sustainable manufacturing much safer, quicker, and more efficient.

Pick and Place Handling Packaging Randomly Picking Control Assembly Testing Installation

Pick and Place
Pick and Place
Testing
Handling
Handling
Assembly
Assembly
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!

Applications in Commerce and Education

- 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

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® 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.

Elephant Robotics® C3
Small Body, Big Dream.

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

For commercial purpose and scientific research

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 (e.g., computer, pad, phone)

Voice Control
Voice control, much more convenient

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.
Elephant Robotics®E5

A Brand-Step for Industries

Elephant Robotics®E5 features a payload of 5kg, a working radius of 810mm and repeatability of ±0.05mm, 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.

For high-precision and high quality industrial application

- Durable
- Precise
- Innovative

Payload: 5KG
Working Radius: 810mm
Position Repeatability: ±0.05mm

Durable and Precise
High-performance components installed

Stable and Rigid
Unique structure-symmetrical on both sides

Innovative
Innovative design, independent R&D

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Overview of Elephant Robotics’ Family

<table>
<thead>
<tr>
<th>Products Series</th>
<th>Products Feature</th>
<th>Recommended Fields</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elephant Robotics®BP Series</td>
<td>Universal: Wide range of applications, can easily meet the automation requirements</td>
<td>3C electronics, metal processing, scientific research, medical, auto industry and other industries</td>
</tr>
<tr>
<td></td>
<td>More Agile: Ingenious structure design, ≥360° maximum working range</td>
<td></td>
</tr>
<tr>
<td></td>
<td>User Friendly: Strong device compatibility and fine system operability</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Payload: 3/5kg, Working Radius: 550mm/850mm, Position Repeatability: ±0.05mm</td>
<td></td>
</tr>
<tr>
<td>Elephant Robotics®BC Series</td>
<td>All in One: Integrates the control cabinet into the robot arm body, only weight 18kg in total, more portable</td>
<td>Commercial scenario, scientific research, education scenario, medical scenario, showing case scenario etc.</td>
</tr>
<tr>
<td></td>
<td>Cloud Programming: Allows anyone to program by using a terminal device or computer and easy to share</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Voice Control: Voice control and programming, much more convenient</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Payload: 3kg, Working Radius: 600mm, Position Repeatability: ±0.05mm</td>
<td></td>
</tr>
</tbody>
</table>
### Specifications

<table>
<thead>
<tr>
<th>Robot Model</th>
<th>P3</th>
<th>P5</th>
<th>C3</th>
<th>ES</th>
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</thead>
<tbody>
<tr>
<td>Payload</td>
<td>3kg</td>
<td>3kg</td>
<td>3kg</td>
<td>5kg</td>
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<tr>
<td>Working radius</td>
<td>550mm</td>
<td>650mm</td>
<td>400mm</td>
<td>610mm</td>
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<tr>
<td>Degrees of freedom</td>
<td>6</td>
<td>6</td>
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<td>Tool speed</td>
<td>1m/sec</td>
<td>1m/sec</td>
<td>1m/sec</td>
<td>1m/sec</td>
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<tr>
<td>Weight</td>
<td>17kg</td>
<td>24.3kg</td>
<td>18kg</td>
<td>23kg</td>
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<td>Position repeatability</td>
<td>±0.05mm</td>
<td>±0.05mm</td>
<td>±0.05mm</td>
<td>±0.05mm</td>
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<tr>
<td>Dimensions robot base</td>
<td>123mm×123mm</td>
<td>125mm×125mm</td>
<td>125mm×125mm</td>
<td>125mm×125mm</td>
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<tr>
<td>Programming mode</td>
<td>Graphical programming</td>
<td>Graphical programming</td>
<td>Graphical programming</td>
<td>Graphical programming</td>
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<tr>
<td>IP classification</td>
<td>IP44</td>
<td>IP42</td>
<td>IP42</td>
<td>IP42</td>
</tr>
<tr>
<td>Typical power consumption</td>
<td>140W</td>
<td>240W</td>
<td>180W</td>
<td>240W</td>
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<tr>
<td>Materials</td>
<td>Aluminium alloy, Rubber</td>
<td>Aluminium alloy, PC, Rubber</td>
<td>Aluminium alloy, ABS, Rubber</td>
<td>Aluminium alloy, PC, Rubber</td>
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<tr>
<td>Operating temperature range</td>
<td>0~50°C</td>
<td>0~50°C</td>
<td>0~50°C</td>
<td>0~50°C</td>
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<td>Noise</td>
<td>&lt;70dB</td>
<td>&lt;70dB</td>
<td>&lt;70dB</td>
<td>&lt;70dB</td>
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<td>Robot mounting</td>
<td>Any angle</td>
<td>Any angle</td>
<td>Any angle</td>
<td>Any angle</td>
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<td>Relative humidity</td>
<td>5%~95%</td>
<td>5%~95%</td>
<td>5%~95%</td>
<td>5%~95%</td>
</tr>
<tr>
<td>I/O ports</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Power supply</td>
<td>DC 24V 1.5A</td>
<td>DC 12V/24V 0.2A</td>
<td>DC 24V 1.5A</td>
<td>DC 12V/24V 0.2A</td>
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<tr>
<td>Tool power supply</td>
<td>DC 24V 1.5A</td>
<td>DC 12V/24V 0.2A</td>
<td>DC 24V 1.5A</td>
<td>DC 12V/24V 0.2A</td>
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<tr>
<td>Communication</td>
<td>Ethernet/IP USB 2.0</td>
<td>Ethernet/IP USB 2.0</td>
<td>Ethernet/IP USB 2.0</td>
<td>Ethernet/IP USB 2.0</td>
</tr>
</tbody>
</table>

### Controller for Elephant Robotics®P,E Series

- **Size:** 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 output:** Digital Input: 16
- **Digital Input:** 16
- **Tool I/O ports input:** Digital Digital Input: 3
- **Tool I/O ports output:** DC 12/24V 0.2A
- **Power supply:** DC 24V 1.5A
- **I/O ports output:** Digital Digital Input: 3
- **Communication:** RS 485, EtherNet/IP USB 2.0

### Teach Pendant for Elephant Robotics®P,E Series (Optional for C Series)

- **Size:** 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:** 303mm×204mm×154mm
- **Weight:** 6kg
- **Power supply:** AC 110-240V, 50-60Hz
- **IP Rate:** IP20
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.

**Program Widget**

- **Basic**
  - Waypoint
  - Gripper
  - Wait
  - Set
  - Group
  - Trajectory

- **Logic**
  - Loop
  - If/else
  - Subprogram
  - Thread
  - Halt
  - Switch

- **Advanced**
  - Variables
  - Script Code
  - Popup
  - Pattern
  - Sender

- **Extension**
  - Voice Prompt
  - Vision
  - Radar
  - Add More

**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
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**

**Electric Screwdriver**

**Long Range Adaptive Gripper**

**Short Range Adaptive Gripper**

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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.