myCobot Pro 630

Commercial 6-Axis Collaborative Robot

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www.elephantrobotics.com/en
Warning

Before using myCobot Pro 630, please read all instructions and cautionary markings in this manual.

1. Do not expose the product to rain or moisture to reduce fire or shock hazard.
2. Do not place the product in or near fire.
3. Do not leave the product in a car in hot or humid weather.
4. Do not disassemble, crush or pierce the product.
5. Do not expose the product to excessive shock such as dropping from a high place.
6. Do not expose the product to high temperatures above 60 °C (140 °F)

Developed by Elephant Robotics, the myCobot Pro series aims to automate repetitive tasks in educational and commercial environments. This collaborative robot is lightweight and compact, featuring an all-in-one design with a 2kg payload and 630mm working radius. It’s designed for portability, power, and ease of use, ensuring great value.

The myCobot Pro 630 stands out for its simplicity, safety, and cost-effectiveness, making it a prime choice for streamlining production lines. It quickly integrates into workflows, significantly lowering costs and boosting operational efficiency for businesses.
myCobot Pro 630- Design Prototype - Elephant Robot®C Series Robot

The design prototype of myCobot Pro is from All-in-one Robot launched by Elephant Robot in China in 2018. As the first integrated collaborative robot in China, it has won the 2019 CAIMRS Industrial Robot Innovation Award and 2019 High-tech Robot Annual “Innovation Technology Award”, and has been also sold to more than 30 countries globally, receiving unanimous praise and recognition from the factories of the world’s top 500 enterprises.

Raspberry Pi control
- Roboflow operating system independently developed and easy to use
- Support ROS/Python and other development systems

Economical & Applicable
- Ultra-high cost performance, effectively reducing costs and increasing efficiency for enterprises.

Excellent performance & Always reliable
- Adopting harmonic drive module + servo motor, high-performance commercial light industrial manipulator.
- The structure is exquisite, convenient to carry, easy to install, and can be plug and play.

All-in-one design & Collaborative operation in safe
- The all-in-one design helps make full use of the working space and perfectly integrate into the production environment.
- The anti-collision detection function based on the precise dynamic model enables it to work well with workers.
myCobot Pro 630: Size and Working Range Diagram

Parameter

<table>
<thead>
<tr>
<th>Product</th>
<th>myCobot Pro-630</th>
</tr>
</thead>
<tbody>
<tr>
<td>DOF</td>
<td>6</td>
</tr>
<tr>
<td>Reach</td>
<td>630 mm</td>
</tr>
<tr>
<td>Payload</td>
<td>≤ 2 Kg</td>
</tr>
<tr>
<td>Repeatability</td>
<td>±0.1 mm (Standard) ISO 9283</td>
</tr>
<tr>
<td>Life Span</td>
<td>&gt;10000 h</td>
</tr>
<tr>
<td>Power Supply</td>
<td>DC 48V</td>
</tr>
</tbody>
</table>

Joints range

- J1: ±360°
- J2: ±135°
- J3: ±135°
- J4: ±150°
- J5: ±360°
- J6: ±360°

Operating Systems

- Windows, Linux, Mac

Communication Protocols

- TCP/IP-Socket
- MODBUS
- EtherNet/IP

Programming Languages and Software

- ROS 1, ROS 2
- myBlockly, myStudio
- Matlab, Python, C++

Connectivity

- WiFi-2.4G/5G
- BT-2.4G/5G
- USB 2.0 *2
- USB 3.0 *2
- RJ45 *1
- RS 458

Video Output

- MicroHDMI *2 supports wireless VNC connectivity

Base Out Power

- 24V 2A[Max]  

Base INPUT

- 24V 50mA[Max] NPN *6

Base OUTPUT

- 24V 50mA[Max] PNP *6

Tools Out Power

- 24V 2A[Max]

Tools INPUT

- 24V 50mA[Max] NPN *2

Tools OUTPUT

- 24V 50mA[Max] PNP *2

Tools Out Power

- 24V 2A[Max]  

Tools INPUT

- 24V 50mA[Max] NPN *6
警告

在使用本产品之前，请阅读本手册中所有说明及警告提示。

- 为避免火灾或电击危险，勿将产品置于雨中或潮湿的地方。
- 请勿将产品置于火中或靠近火处。
- 请勿将产品放置或使用在炎热潮湿的地方。
- 请勿暴力拆卸产品。
- 请勿将产品置于过度的冲击下，如从高处跌落。
- 不要将产品置于超过60°C(140°F)的高温下。
myCobot Pro 630系列机器人旨在用于教育和商业环境中替代重复性劳动。这款轻量级、紧凑且一体化的协作机器人，具有2公斤的负载能力和630毫米的工作半径，便携、强大、易用且性价比高。

myCobot Pro 630以其简单性、安全性和经济性为特点，成为自动化生产线、大幅降低成本和提升企业运营效率的理想选择。
myCobot Pro 630原型-大象机器人C系列all-in-one机器人

myCobot Pro 630的设计原型为大象机器人2018年推出的国内首款ALL-IN-ONE一体式协作机器人。作为国内首款一体式协作机器人，它曾获得2019CAIMRS工业机器人创新奖，2019高工机器人年度“创新技术奖”，远销海内外30多个国家并备受数家来自世界500强名企的一致认可与好评。

myCobot Pro 630尺寸与工作范围图

有限半径r=630mm
### 产品保修卡

**用户信息 (必填):**

购买人 ___________________ 订单号 ___________________ 联系电话 ___________________

地址 ___________________ 物流签收日期 ___________________

产品问题描述 (必填): ___________________

如需退换货，请事先联系客服确认退回相关信息。待客服确认后，填写此卡并将这一页随同产品一起寄回。

注: 我司在法律允许范围内保留对本产品保修卡解释和修改的权利。

- 产品自签收起7日内未拆封可无理由退换, 因产品退换所产生的费用及其他风险需由客户承担。
- 用户如需产品保修服务需提供相应的购买单据及产品保修卡作为保修凭证。
- 凡属于正常使用下由于产品本身质量问题引起的硬件故障，保修期内大象机器人给予免费维修。
- 保修起始日期为产品购买日或物流签收日。
- 维修更换的配件归大象机器人所有，必要时会收取适当的成本费用。

### 产品参数

**产品名称**: myCobot Pro-630

| 自由度 | 6 |
| 伸展范围 | 630 mm |
| 有效载荷 | ≤ 2 Kg |
| 重复精度 | ±0.1 mm (Standard) ISO 9283 |
| 使用寿命 | >10000 h |
| 电源 | DC 48V |
| 关节范围 | J1: ±360°  
  J2: ±135°  
  J3: ±135°  
  J4: ±150°  
  J5: ±360°  
  J6: ±360° |
| 支持的操作系统 | Windows, Linux, Mac |
| 通信协议 | TCP/IP-Socket  
 MODBUS  
 EtherNet/IP |
| 编程语言和软件 | ROS 1, ROS 2,  
 myBlockly, myStudio,  
 Matlab, Python, C++ |

#### 连接性

- WiFi-2.4G/5G
- BT-2.4G/5G
- USB 2.0 *2
- USB 3.0 *2
- RJ45 *1
- RS 485

#### 视频输出

- MicroHDMI *2
- 无线VNC连接

#### 基座输出电源

- 24V 2A(Max)

#### 基座输入IO端口

- 24V 50mA(Max) NPN *6

#### 工具输入IO端口

- 24V 50mA(Max) NPN *2

#### 基座输出IO端口

- 24V 2A(Max)

#### 工具输出IO端口

- 24V 50mA(Max) PNP *6

#### 基座输出IO端口

- 24V 50mA(Max) PNP *2

### 产品保修卡

**产品保修卡**

- 用户信息 (必填):
  - 购买人 ___________________
  - 订单号 ___________________
  - 联系电话 ___________________
  - 地址 ___________________

- 产品问题描述 (必填): ___________________

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注: 我司在法律允许范围内保留对本产品保修卡解释和修改的权利。

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- 用户如需产品保修服务需提供相应的购买单据及产品保修卡作为保修凭证。
- 凡属于正常使用下由于产品本身质量问题引起的硬件故障，保修期内大象机器人给予免费维修。
- 保修起始日期为产品购买日或物流签收日。
- 维修更换的配件归大象机器人所有，必要时会收取适当的成本费用。
**Return service is limited to goods not opened within 7 days after the receipt date of logistics of the products. The freight or other risks incurred in return shall be borne by the customer.**

**Customers should provide the purchasing invoice and warranty card as the warranty certification when a warranty is being asked.**

**Elephant Robotics will be responsible for the hardware faults of products caused by the normal using during the warranty period.**

**The warranty period starts from the date of purchase or the receipt date of the logistics.**

**The faulty parts from the products will be owned by Elephant Robotics, and the appropriate cost will be charged if necessary.**

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### Warranty Card

<table>
<thead>
<tr>
<th>Customer Information (Required):</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purchaser _______ Order No. _______ Phone _______</td>
</tr>
<tr>
<td>Address _______ Logistics Receipt Date _______</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Product problem description (Required):</th>
</tr>
</thead>
</table>

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If you need to apply for warranty service, please contact our customer service to confirm the detailed information. After confirmation, please fill in the card and send it back together with the product and the attached invoice. Note: Our company reserves the right to explain and modify the warranty card of this product within the scope of the law.

- Return service is limited to goods not opened within 7 days after the receipt date of logistics of the products. The freight or other risks incurred in return shall be borne by the customer.
- Customers should provide the purchasing invoice and warranty card as the warranty certification when a warranty is being asked.
- Elephant Robotics will be responsible for the hardware faults of products caused by the normal using during the warranty period.
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### 产品保修范围说明

<table>
<thead>
<tr>
<th>零部件类型</th>
<th>90 天</th>
<th>180 天</th>
<th>360 天</th>
</tr>
</thead>
<tbody>
<tr>
<td>结构外壳</td>
<td>免费维修</td>
<td>免费维修</td>
<td>免费维修</td>
</tr>
<tr>
<td>电源</td>
<td>免费维修</td>
<td>免费维修</td>
<td>免费维修</td>
</tr>
<tr>
<td>控制模块</td>
<td>免费维修</td>
<td>免费维修</td>
<td>付费维修</td>
</tr>
<tr>
<td>传感器</td>
<td>免费维修</td>
<td>免费维修</td>
<td>付费维修</td>
</tr>
<tr>
<td>关节模组</td>
<td>免费维修</td>
<td>付费维修</td>
<td>付费维修</td>
</tr>
</tbody>
</table>

大象机器人作为领先的机器人生产供应商，旨在为客户提供良好的使用体验，以下情况下，将对客户收取修理费用（即使在保修期内）：

1. 因不同于手册内容的错误使用以及使用不当而导致的损坏或故障
2. 客户未经授权进行拆卸导致的故障
3. 属于外壳等部件自然的消耗，磨损及老化
4. 因调整不当或未经授权进行修理而导致的损坏
5. 因地震、洪水等自然灾害导致的损坏 因此，请严格遵照本手册及相关手册的指示对机器人进行操作。

特别说明：

上表所述时间计算周期为自然日，计算的方式为：自大象机器人仓库发出后15个工作日后开始累加。

<table>
<thead>
<tr>
<th>零部件类型</th>
<th>结构外壳</th>
<th>电源</th>
<th>控制模块</th>
<th>传感器</th>
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</tr>
</thead>
<tbody>
<tr>
<td>零部件类型</td>
<td>付费维修</td>
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<td>付费维修</td>
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<tr>
<td>关节模组</td>
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<td>付费维修</td>
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</tbody>
</table>
As a leading robotics supplier, Elephant Robotics is dedicated to offering customers a positive experience. However, in the following cases, the customer will be charged for repairs (even during the warranty period):

1. Damage or malfunction caused by incorrect use and improper use different from the contents of the manual.
2. Failure caused by unauthorized disassembly by the customer.
3. Damage caused by improper adjustment or unauthorized repairs.
4. Damage caused by natural disasters such as earthquakes and floods.

Therefore, please strictly follow the instructions in this manual and related manual to operate the robot.

The calculation period mentioned in the table is based on calendar days, starting 15 working days after the product is dispatched from Elephant Robotics' warehouse.

<table>
<thead>
<tr>
<th>Product Category</th>
<th>90 Day</th>
<th>180 Day</th>
<th>360 Day</th>
</tr>
</thead>
<tbody>
<tr>
<td>Whole Machine</td>
<td>Free repair</td>
<td>Free repair</td>
<td>Free repair</td>
</tr>
<tr>
<td>Power Supply System</td>
<td>Free repair</td>
<td>Free repair</td>
<td>Free repair</td>
</tr>
<tr>
<td>Control System</td>
<td>Free repair</td>
<td>Free repair</td>
<td>Paid repair</td>
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<tr>
<td>Sensors</td>
<td>Free repair</td>
<td>Free repair</td>
<td>Paid repair</td>
</tr>
<tr>
<td>Joint Motor</td>
<td>Free repair</td>
<td>Paid repair</td>
<td>Paid repair</td>
</tr>
</tbody>
</table>