

小象协作机械臂-商用版

myCobot Pro 600

商用六轴协作机器人

Commercial 6-Axis Collaborative Robot



⚠ Warning

Before using myCobot Pro 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)





Commercial 6-axis collaborative robot

myCobot Pro-600 is designed to alternative repetitive labor force, which can be applied in business and light industry. myCobot pro 600 is a reliable lightweight collaborative robot, developed by Elephant Robotics with a mini and all-in-one design.

With a dead weight of 8.8 kg, a payload of 2kg, and a working radius of 600mm. myCobot pro-600 is portable but powerful, easy to use, and super cost-effective. It has three main advantages of simplicity, safety and economy as the best choice for automated production. Deployed on the production line fast, myCobot Pro-600 reduces much costs and increases working efficiency for enterprises.





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.



Raspberry Pi control

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



Excellent performance & Always reliable

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



Economical & Applicable

- The standard 7×24 hours work system is a perfect substitute for high repeatability and standard assembly line work.
- Ultra-high cost performance, effectively reducing costs and increasing efficiency for enterprises.

myCobot Pro - 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 at home and abroad, receiving unanimous praise and recognition from the factories of the world's top 500 enterprises.

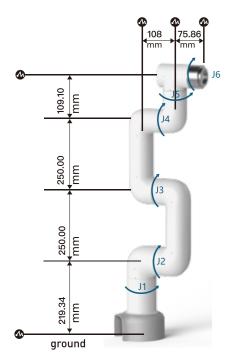


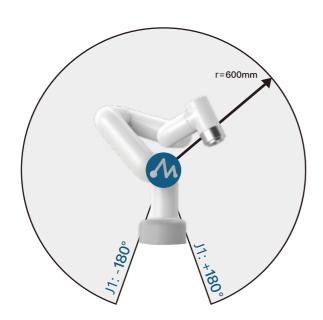






myCobot Pro-600 : Size and Working Range Diagram





Parameter

Product	myCobot Pro
model	mycobot Pro-600
Weight	8.8kg
Payload	2kg
IP level	IP42
Repeatability	±0.5mm
Working radius	600mm
Material	Aluminum alloy, plastic, rubber
Working Condition	0~50°C
Maximum end speed	0.6m/s
Joints range	J1 +/- 180°; J2 -270~90°; J3 +/- 150°; J4 -260~80°; J5 +/- 168°; J6 +/- 174°;
DOF	6
Power Supply	100-240VAC 50-60Hz
Power Consumption	Min 60W Typical 120w Max 280w
Software	RoboFlow, Python

Base interface	Net port and port*1, typeC port, microHDMI*2, USB2.0 port*2 USB3.0 port*2, IO interface Emergency stop interface 48V power interface
Base IO	Digital-INPUT x6 Digital-OUTPUT x6
Tool side IO port	24V/ GND number D-INPUT X2 number D-OUTPUT X2
Servo motor - motor	Servo motor / brushless DC motor
Servo motor - reducer	Harmonic reducer / gear set
Servo motor - encoder	19/12 bit
Programming mode	Visual programming
Maximum joint speed	J1/J2/J3: 115°/sec J4/J5/J6: 115°/sec
Cooperative operation	Human-machine cooperation
Robot installation mode	Any angle
Humidity Limit	5%-80%
Noice	<70 dB

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⚠ 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,请勿将产品暴露在雨中或潮湿的地方。
- 请勿将产品放在火中或靠近火处。
- 请勿将本产品放置或使用在炎热潮湿的地方。
- 请勿暴力拆卸本产品。
- 请勿将产品暴露在过度的冲击下,如从高处跌落。
- 不要将产品暴露在超过60°C(140°CF)的高温下。



myCobot Pro

myCobot Pro-600

商用 超高性价比



经济性



紧凑性

易用性

(V)





商用六轴协作机器人

myCobot Pro-600的设计初衷是向大家提供一款可以重复劳动的机器,可作为商用/轻工业的助手,是大象机器人研发的轻量级协作机器人,精巧构思,all-in-one 设计。

本体重量8.8kg,其有效负载 2kg,工作半径600mm,体积相对小巧但功能强大,操作简单且能与人协同安全工作。具有易用性、安全性和经济性三大优势,主要面向于商业、轻工业场景应用,是自动化生产的高性价比之选,能够快速在产线上布署,可为企业降本增效。





树莓派主控

- 大象机器人自主研发 roboflow 操作系统, 简单易用
- 支持 ROS/Python 等开发系统



经济适用 超高性价比

- 标准7x24小时工作制,完美替代高重复性、标准性流水线工作
- 超高性价比,有效为高性能&低成本企业降本增效



性能强大 操作便捷易用

- 采用谐波减速机+伺服电机, 高性能商用轻工业机械臂
- 结构精巧, 方便携带, 安装简便, 可实现即插即用



一体化设计,安全协同作业

- 一体化集成设计使其能够充分利用生产空间, 完美融入生产环境
- 兼备基于精确动力学模型的防碰撞检测功能使其能与人安全协同作业

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myCobot Pro原型-大象机器人C系列all-in-one机器人

myCobot Pro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。

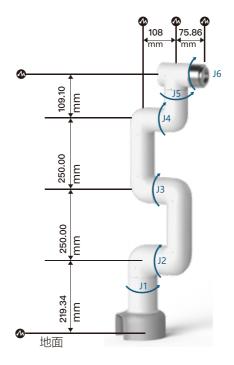








myCobot Pro 尺寸与工作范围图





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产品参数

产品名称	myCobot Pro		网口母口*1, microHDMI*2
产品型号	mycobot Pro-600	底座接口	USB2.0母口*2, USB3.0母口*2 typeC-母口, 急停接口, IO接口
有效负载	2kg		48V电源接口
最大臂展	600mm	工具端 IO端口	24V/ GND
自重	8.8kg		数字D-INPUT X2 数字D-OUTPUT X2
重复定位精度	±0.5mm		数字D-INPUT x6
自由度	6	底座IO	数字D-OUTPUT x6
材料	铝合金、塑料、橡胶	软件	RoboFlow, Python
工作环境	0~50°C	伺服电机-电机	伺服电机/无刷直流电机
	J1 +/- 180°; J2 -270~90°; J3 +/- 150°; J4 -260~80°; J5 +/- 168°;	伺服电机-减速器	谐波减速机/齿轮组
		伺服电机-编码器	19/12位
关节范围		编程方式	图形化编程
	J6 +/- 174°;	最大关节速度	J1/J2/J3: 115°/sec J4/J5/J6: 115°/sec
噪音	<70 dB	协作操作	人机协作
最大末端速度	0.6m/s	机器人安装方式	任何角度
电源	100-240VAC 50-60Hz	工作环境湿度	5%-80%
功耗	Min 60W Typical 120w Max 280w		
IP等级	IP42		

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<mark>退换货,请事先联系客服确认退回相关信息。</mark>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。

以下为详细的配件保修服务说明(如需以下产品售后服务,请事先联系客服沟通并确认相关信息)

舵机	
保修期限	保修服务
≤ 6个月	我司免费提供新的舵机,并承担运费(仅一次)
>6个月	客户需自己重新购买

结构件、含外壳部分

	保修期限	保修服务
Ī	≤1年	我司免费提供新的零件,由客户自行承担运费(仅一次)
	≥1年	客户需自己重新购买

特别说明: 在交付产品的保修期内,本公司仅对正常使用机器人时发生的故障进行免费修理。 但在以下情况下, 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。

WARRANTY CARD

Customer Information (Require	d):	
Purchaser	Order No	Phone
Address		Logistics Receipt Date
Product problem description(Re	equired):	

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.
- 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.

If you need to apply for warranty service, please contact our customer service first to confirm the detailed information.

Warranty Period	Warranty Services
	•
<6 months	Elephant Robotics offers a free new sever motor and bear the freight.
>6 months	Customers need to buy it themselves.
Structure Parts,	including Shell Parts
≤1 year	Elephant Robotics offers free new components once.
<1 year ≥1 year	Elephant Robotics offers free new components once. Customers need to buy it themselves.

normal use of the robot for free. However, in the following cases, the customer will be charged for repairs (even during the warranty period):

• Damage or malfunction caused by incorrect use and improper use different from the contents of the manual.

• Failure caused by unauthorized disassembly by the customer.

During the warranty period of the delivered product, the company only repairs the malfunctions that occur during

• Damage caused by improper adjustment or unauthorized repairs.

Savar motor

- Damage caused by improper adjustment of unauthorized repairs.
 Damage caused by natural disasters such as earthquakes and floods.
- Damage caused by natural disasters such as earthquakes and moods.

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

深圳市大象机器人科技有限公司

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