

# 公司简介:

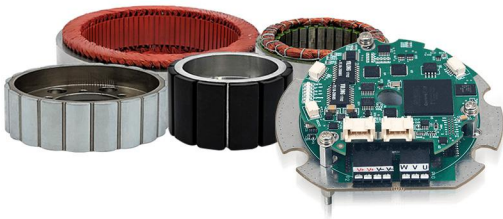
Company Profile

深圳市泰科智能伺服技术有限公司始创于2008年，积累了十多年的电机、伺服驱动核心技术开发、生产和应用经验，具有伺服驱动器核心技术自主知识产权。自2016年开始，依托公司在低压伺服系统方面强大的技术基础，开始研发协作机器人关节模组。2019年，已经开发完成了一系列机器人电机、伺服驱动器、抱闸、增量/绝对值编码器、RJS/RJSII/RJU/SHD系列机器人关节模组，TA6/TB6系列6轴协作机械人等产品，广泛应用于工厂自动化、汽车、3C、医疗、电力、航天、科研、教育等应用领域。

Techservo(Shenzhen) Co., Ltd. founded in 2008, has accumulated more than ten years of experience in the development of core technologies of motors and servo drives, production and application of the servo products。Techservo now have servo driver's core independent intellectual property rights 。Since 2016, relying on the company's strong technical foundation in low-voltage servo systems, Techservo have begun to develop robotic joint modules. In 2019, Techservo developed and completed a series of robotic motors, servo drives, brakes, incremental / absolute encoders, RJS / RJSII / RJU / SHD robotic joint modules, TA6 / TB6 6-axis co-robot and others. The products have been widely used in factory automation, auto industry, 3C, medical , power, aerospace, scientific research, education and other application areas.



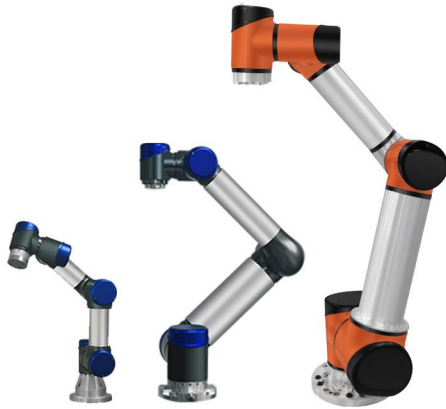
1、 AP系列高性能伺服驱动器  
AP series high performance servo driver



2. 机器人关节伺服驱动模块  
及关节无框电机  
Robotic joint servo drive module and  
joint frameless motor



3. RJS/RJSII/RJU系列机器人关节模组  
RJS / RJSII / RJU series robotic joint module



4. TA6/TB6系列协作机器人  
TA6 / TB6 series co-robot

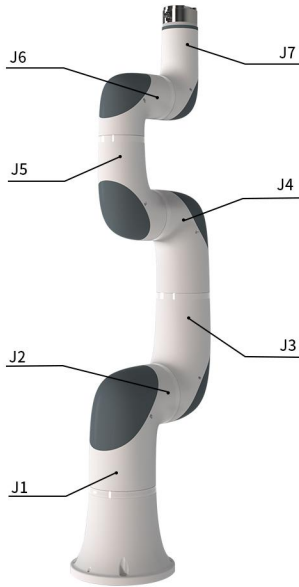


- 1. 核心竞争力：拥有一支强大而稳定的高性能直流伺服系统开发、生产、应用10年以上经验的技术团队，精通伺服驱动器高级核心控制算法，具有完全自主知识产权，可满足客户OEM定制需求。
- 2. 拥有超过3家长期合作、技术一流的国内电机与绝对值编码器研发生产合作伙伴，满足定制化与成本要求。
- 3. RJSII系列机器人关节模组与TB6系列协作机器人能满足大负载、宽臂展、高精度、大内孔径穿线、高压电磁环境、-40°低温度、IP64防护等级等苛刻环境要求。
- 4. 自2018年，与韩国Daincube公司合作开发协作机器人控制器。控制器先进、稳定、安全、可靠，与TB6系列机械臂配套，具有良好的拖动试教、高灵敏度碰撞的优异特性。同时可支持末端六维力传感器或6关节单维力传感器控制。单控制器也可支持双臂控制，为客户进一步缩减体积，降低成本。
- 5. 接受客户在公司标准的机器人关节与协作机器人的基础上，灵活定制客户所需要的结构、自由度、颜色，防护等级等各类需求。

- 1. Core competitiveness: Techservo has a strong and stable technical team with more than 10 years of experience in the development, production and application of high-performance DC servo systems. It’ s proficient at the advanced core control algorithms of servo drives, has completely independent intellectual property rights, and can meet customer OEM customization demand.
- 2. Has more than 3 long-term cooperation companies, who are first-class domestic motor and absolute encoder R & D and production manufacturers, to meet customization and cost requirements.
- 3. RJSII robotic joint module and TB6 series co-robot can meet the harsh use environmvent such as heavy load, wide arm span, high precision, large diameter of the middle through-line hole, high voltage electromagnetic environment, -40° low temperature, IP64 protection level and so on.
- 4. Since 2018, we have cooperated with DAINCUBE Inc. (Korea) to develop co-robot controllers. The controller is advanced, stable, safe, and reliable. It is matched with the TB6 robotic arm, and has the excellent characteristics of good drag teaching and high sensitivity collision. At the same time, it can support the control of end six-dimensional force sensor or 6 joint single-dimensional force sensor. A single controller can also support dual-arm control, it can further reduce the size and cost for customers.
- 5. On the basis of the company's standard robotic products, we can flexibly customize the structure, degree of freedom, color, protection level and other requirements of customers. quickly and cost-down.



# TB7-R3协作机器人



## 技术参数:

### TECHNICAL SPECIFICATIONS

#### ● 机械臂 Robotic arm

性能 Performance	
重复定位精度: Repeatability	±0.05mm
环境湿度: Ambient humidity range	25-85%(无冷凝 Not condensable)
环境温度: Ambient temperature range	-20-45°C
功耗: Power consumption	400w(普通工况下 Normal working condition)
额定寿命: Rated life	30000h
协同操作: Cooperative operation	根据IOS10218-1: 2011进行协同操作, 具备“安全适用的受监控停止”“拖动示教”以及“功率与力限制”等协作机器人安全功能 Cooperative operation according to IOS10218-1: 2011, equipped with collaborative robot safety functions such as "safe and applicable monitored stop", "drag teaching", and "power and force limitation"

规格 Specification	
自由度: Degreen of freedom	7
臂展: Reach	734.3mm
负载: Payload	3kg
编程: Programming	在7寸触摸屏示教器的图形用户界面上进行 On the graphical user interface of the 7-inch touch screen teach pendant

特点 Features	
安装方式: Robot mounting	任意角度 Any Orientation
防护等级: Classification	IP54
噪音 Noise	≤60dB

物理 Physical	
通讯协议: Communication protocol	EtherCAT
供电电源: Power supply	DC 48V
重量: Weight	18kg
材料: Materials	铝合金 Aluminum alloy
占地面积 Footprint	Φ190mm

#### ● 运动轴 Axis movement robot arm

	运动范围Working range	最大速度Maximum speed
J1	± 175°	150°/s
J2	± 175°	150°/s
J3	± 175°	180°/s
J4	± 175°	180°/s
J5	± 175°	180°/s
J6	± 175°	180°/s
J7	± 175°	300°/s
末端速度: Typical Tcp speed:	≤1.5m/s	

#### ● 机械臂I/O接口 I/O ports in tool

I/O电源输出 I/O Voltage	电流输出 continuous current	EtherCAT输出 Ethercat Out
24V DC	1A	1路

#### ● 控制箱 Control box

尺寸: Size	460*220*420mm	颜色: Color	灰色 Grey
重量: Weight	10Kg	供电电源: Power supply	100-240VAC, 50 - 60Hz
连接线长度: Cable length robot arm	6m	防护等级: classification	IP54
通讯协议: communication protocol	Ethernet , Modbus-RTU/TCP		

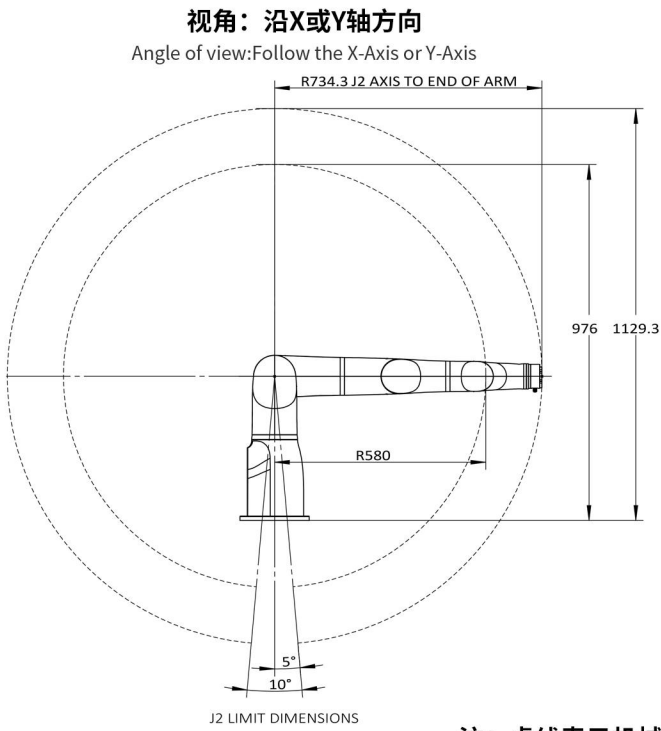
#### ● 控制箱I/O接口 Control box I/O

	普通I/O User I/O	安全I/O Safety I/O
数字量输入: Digital input	16	16
数字量输出: Digital output	16	16
I/O电源 I/O Power supply	24V 5A	

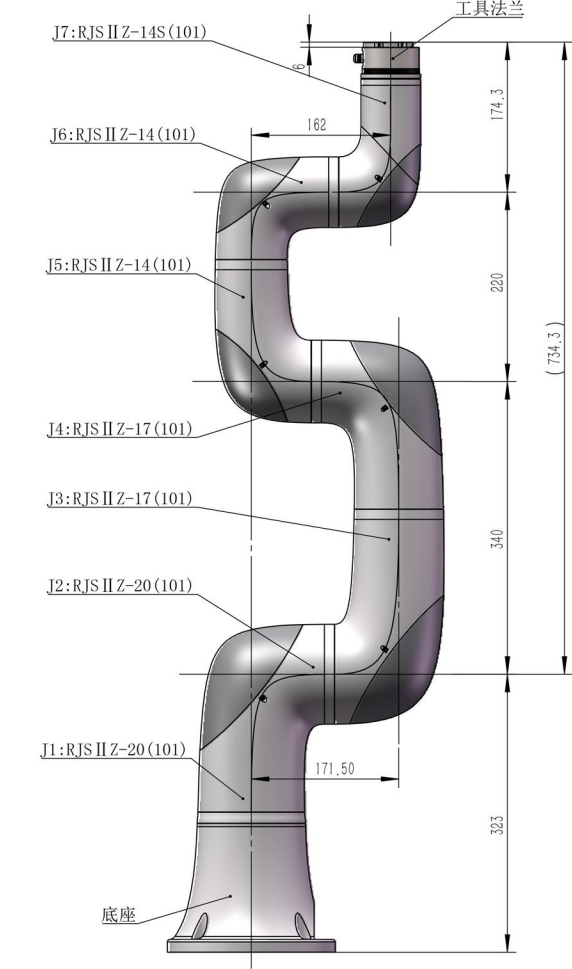
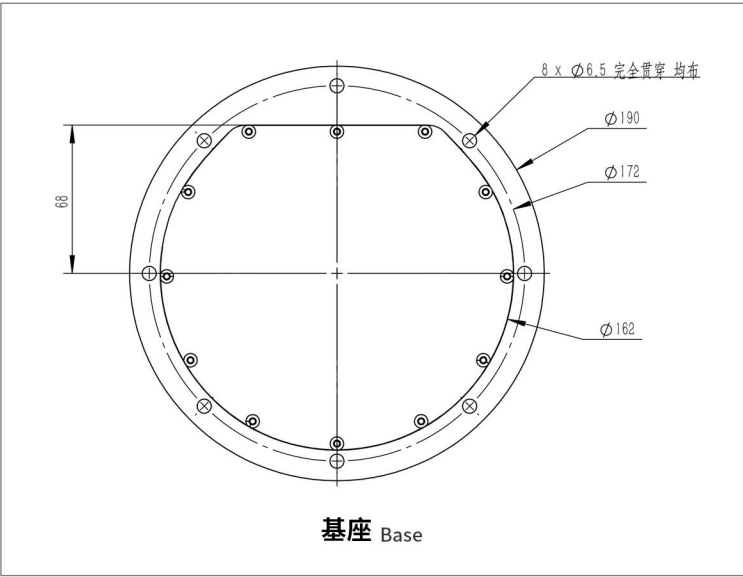
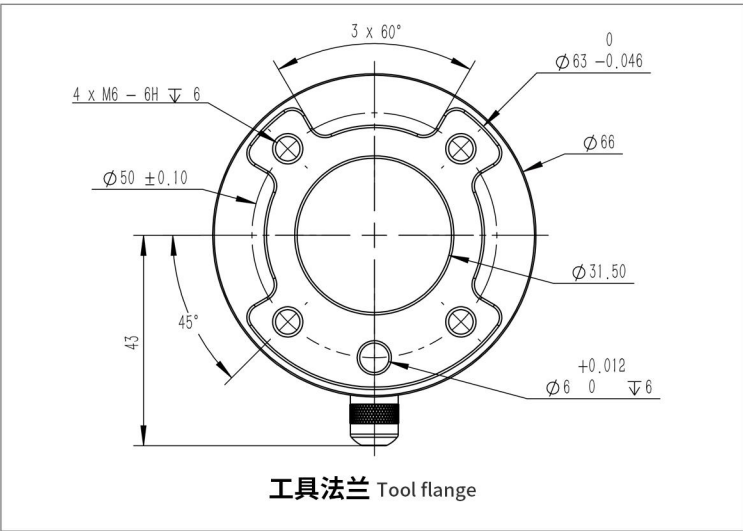
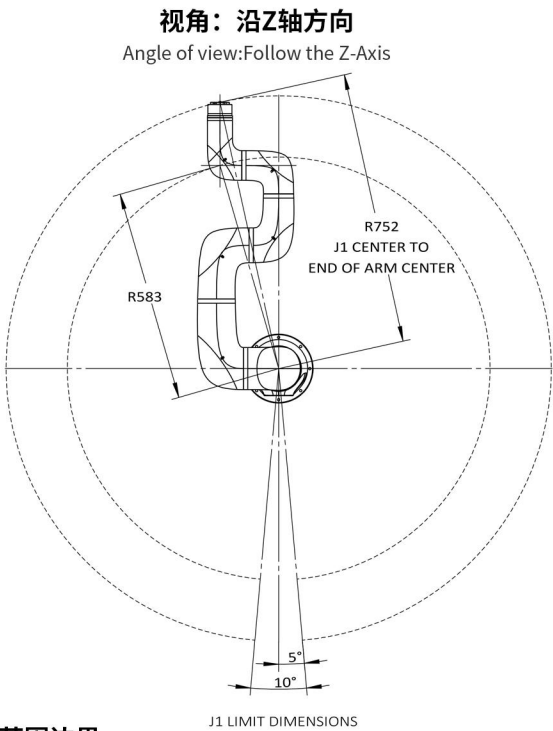
#### ● 示教器 Teach Pendant

尺寸: Size	265*185*50mm	连接线长度: Cable length	6m
重量: Weight	1kg	防护等级: classification	IP54
显示器: Display panel	7寸电阻式液晶触控屏 7inch resistive touch scree	颜色: Color	黑色 black

# TB7-R3协作机器人



注: 虚线表示机械臂运动范围边界  
Annotation:The dotted line represents the movement boundary or the robotic arm



- ※ 采用摩擦式抱闸 Electromagnetic friction disc type brake
- ※ 中间过线孔最大孔径 Φ6.5mm  
The maximum diameter of the middle through-line hole is Φ 6.5mm
- ※ 客户OEM定制可选 Custom OEM options