

# CRP-RC08-05

## INDUSTRIAL ROBOT 6-axis Light-duty Robot



### PRODUCT INTRODUCTION

·Crobotp six-axis light load robot has inherent characteristics such as safety, lightness, high flexibility, intelligence and convenience, so that people and robots are no longer separated by cold railings, and people can work together with robots, while robots it is no longer just a tool, but a personal assistant and intimate partner.

### FEATURES

- High safety: From hardware to software, multiple redundant designs are adopted, which can work together with humans to ensure the safety of personnel after a collision, and realize the sharing of working space between machines and humans.
- Easy to program: It has the function of dragging and teaching. The programming is simple, and it can quickly respond to the production mode of small batches and multiple varieties. The programming style conforms to ergonomic habits, and there is no professional requirement for programming users.
- Simple maintenance: The entire use process of the robot is maintenance-free, and the body adopts a modular design, which is quick and convenient to repair and replace parts. The comprehensive use cost of users is low, the overall project investment is small, and the return period is short.
- Strong reliability: Crobotp controller is the most mature industrial robot controller on the market at present (tens of thousands of units in the market, 24 hours of non-stop work fully proves the long-term reliability of our controller in the industrial environment).
- Simple and easy to use: the body is light in weight, easy to handle and transport, no special lifting equipment is required, and the deployment is fast.
- Stable communication: The control system to the driver adopts the EtherCAT communication method, which has strong anti-interference ability, fast communication speed, large amount of data interaction, better drag feel, and more sensitive collision response.
- Software customization: The software is completely self-developed and has all source codes, which can quickly respond to customers' customization needs.

### ROBOT BODY TECHNICAL PARAMETERS

| Robot model                    | CRP-RC08-05   |
|--------------------------------|---|
| Weight                         | 22.5kg  |
| Maximum payload                | 5kg   |
| Maximum arm length             | 904mm   |
| Joint range                    | ±360°all joints   |
| Speed                          | Joint maximum 180°/s tool about 1m/s  |
| Repeatability                  | +0.06mm   |
| Degree of freedom              | 6   |
| Features                       | Drag and teach, human-machine collaboration, easy to operate                  |
| Application scenario           | Handling Grinding Assembly  |
| Noise                          | <65dB(A)  |
| Protection class               | IP54  |
| Power consumption              | About 200W when running a typical program                                     |
| Temperature                    | The temperature of the robot installation environment should be within 0-50°C |
| Power supply                   | 100-240V AC 50/60Hz 1000W   |
| Expected operating life        | 30000hours  |
| Connecting cables              | 6m  |
| Installation method            | Any   |
| Electric Cabinet Configuration | CRP-X1-S100   |

### ELECTRIC CABINET TECHNICAL INDICATORS

| Electric cabinet model | CRP-X1-S100  |
|------------------------|--|
| weight                 | 14.5Kg   |
| Power supply           | 100-240V AC 50/60HZ 1000W  |
| Teach Pendant Cable    | 6m cable between teach pendant and control box                                     |
| Control box size       | 466mm*173mm*329.5mm  |
| Control box I/O port   | 23 digital inputs, 23 digital outputs, 4 analog outputs, encoder signal interface  |
| I/O power              | 24V2A in the control box   |
| Communication          | EntherNet/IP Adapter   |
| Operation mode         | Teaching, dragging, process programming (palletizing, vision, tracking, spraying)  |
| Control servo          | EtherCAT bus control, 100M speed, U-level synchronization accuracy                 |
| Software PLC function  | Ladder diagram editing, 5000 steps   |
| Protection class       | IP20   |
| Teaching pendant       | 10.4TFT-LCD, keyboard + touch screen, mode selection switch, emergency stop button |



### MOTION RANGE DIAGRAM

