MiniBOT-7R

7-axis Robot Package for Education

Main Features
- EtherCAT-based
- Compact design
- Suitable for education
- Standard 7-axis articulated robot

Contents
- Control cabinet
- Robot control API
- Articulated 7-axis robot
- Open robot controller

Product Overview
EtherCAT Communication
Based on standard EtherCAT communication, MiniBOT provides an expandable distributed control system. It is also a good material for EtherCAT-related training.

Industrial Robot Design
By referring to design of general industrial 7-axis articulated robots, MiniBOT is built in the same concept. Its nude mechanical architecture makes it easy to learn the structure of an industrial robot.

Open Development Environment
MiniBOT comes with a utility tool to directly operate the robot. Robotic control APIs are also provided in Windows platform, so that users can leverage its openness to develop any kind of robot applications.

Specifications
Robot Arm
- Degree of freedom: 7
- Payload: 1kg
- Driving system: EtherCAT Servo Moto
- Position feedback: Absolute encoder
- Operation range: 682.5mm (maximum)
  - J1: +175° to -159°
  - J2: ±123°
  - J3: ±167°
  - J4: ±129°
  - J5: ±167°
  - J6: ±108°
  - J7: ±180°
- Repeatability: ±0.12mm
- Weight: arm 40kg
- Input voltage: single phase 240Vac

Controller
- DI/O: 16ch DI/15-ch DO
- Power Input: Single Phase 220V ac 10A
- Dimension: 480W*552D*264H (mm)
- Weight: 32kg
- Safety: 1 x EMG on teach pendant,
  1 x EMG on external I/O

Software
- NexARC runtime(Robot control runtime)
- NexMotion Studio(Configuration Utility)
- Provide standard robot motion control functions
- Support C/C++,C# and VB.Net for user programming
- OS: WES7
Robot Operating Space

Installation
- Installation: Floor-mounting

Ordering Information

Robot Package
- MiniBOT-7R robot package (P/N: 98ROBO000001F)

Optional
- Robot stand For MiniBOT-7R (P/N: 6879ROBO0005F) 80 x 80 x 78 (cm)
- Gripper package (P/N: 7900000181X00)
- Terminal board package (P/N: 7900000182X00) 2m and DB-37 terminal board