

## 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

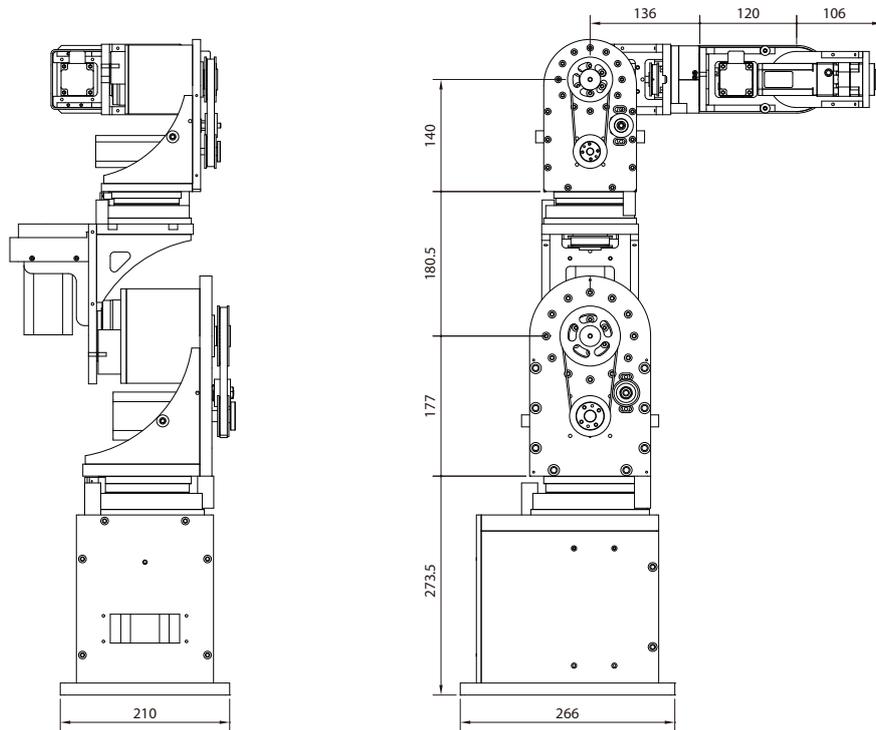
### Controller

- 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

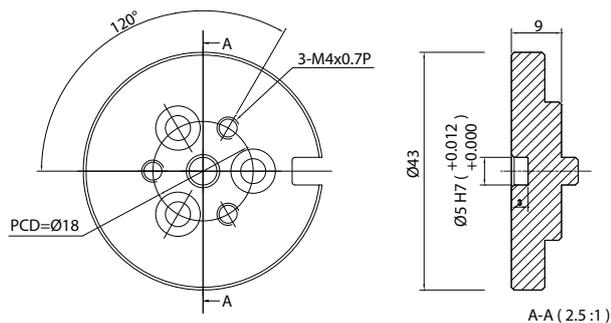
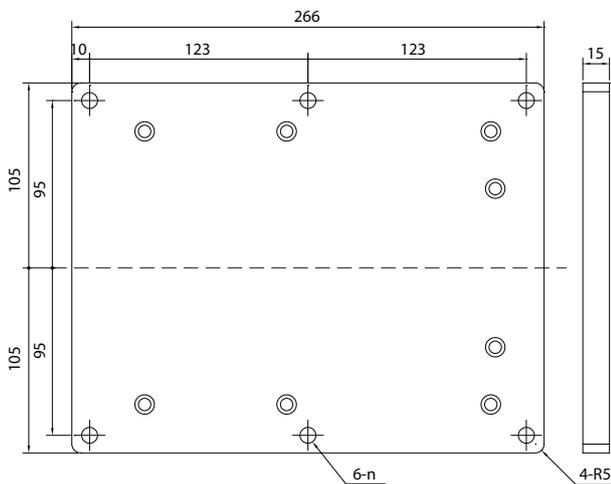
- NexARC runtime(Robot control runtime)
- NexMotion Studio(Configuration Utility)
- Provide standard robot motion control functions
- Support C\C++,C# and VB.Net for user programming
- OS: WES7

## 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