



Contents

- ♦ SCARA Robot Body
- ♦ Servo Motors and Wiring Circuit
- ♦ Control Cabinet
- ♦ Open Robot Controller

Product Overview

EtherCAT-based NexROBO Edu package provides an open programming environment for users to develop their own robot control. It consists of a 4-axis SCARA robot and a robot controller in the control cabinet. Motor drives, I/O signals and related circuits are all integrated based on EtherCAT control network. Single-axis movement for every axis can be easily operated by provided examples. This package is suitable for academy study and R&D research of basic robotic control.

Specifications

Robot

- ♦ Degree of freedom: 4
- ♦ Nominal load capacity: 6kg
- ♦ Motion Range
 - Maximum reach radius: 600mm
 - J1: $\pm 130^\circ$
 - J2: $\pm 150^\circ$
 - J3: 200mm
 - J4: $\pm 360^\circ$
- ♦ Position repeatability
 - J1+J2: ± 0.02 mm
 - J3: ± 0.01 mm
 - J4: ± 0.01 mm
- ♦ Cycle time: 0.5 s
- ♦ Weight: 20 kg
- ♦ J3 (Z-axis) Push Force: 100N
- ♦ Installation: Floor, wall-mounting

Controller

- ♦ Intel® Core™ i5-520M processor pre-installed
- ♦ 2 x 2GB DDR3 SDRAM, pre-installed
- ♦ 500GB HDD
- ♦ 1 x EtherCAT port
- ♦ 1 x Intel® GbE LAN port

- ♦ Dual VGA or VGA/DVI Independent Display
- ♦ 6 x USB 2.0 ports
- ♦ 3 x RS232 and 1 x RS232/422/485 with Auto Flow Control
- ♦ 1 x PCI expansion (10W max./ per slot, 169mm max. length)

Programming

- ♦ Language: Visual C/C++
- ♦ Command Set: Position Command, Velocity Command, Torque Command
- ♦ Parameters: position, velocity, torque
- ♦ RT Example (RTX project)
- ♦ User API Example (win32 dll project)

Ordering Information

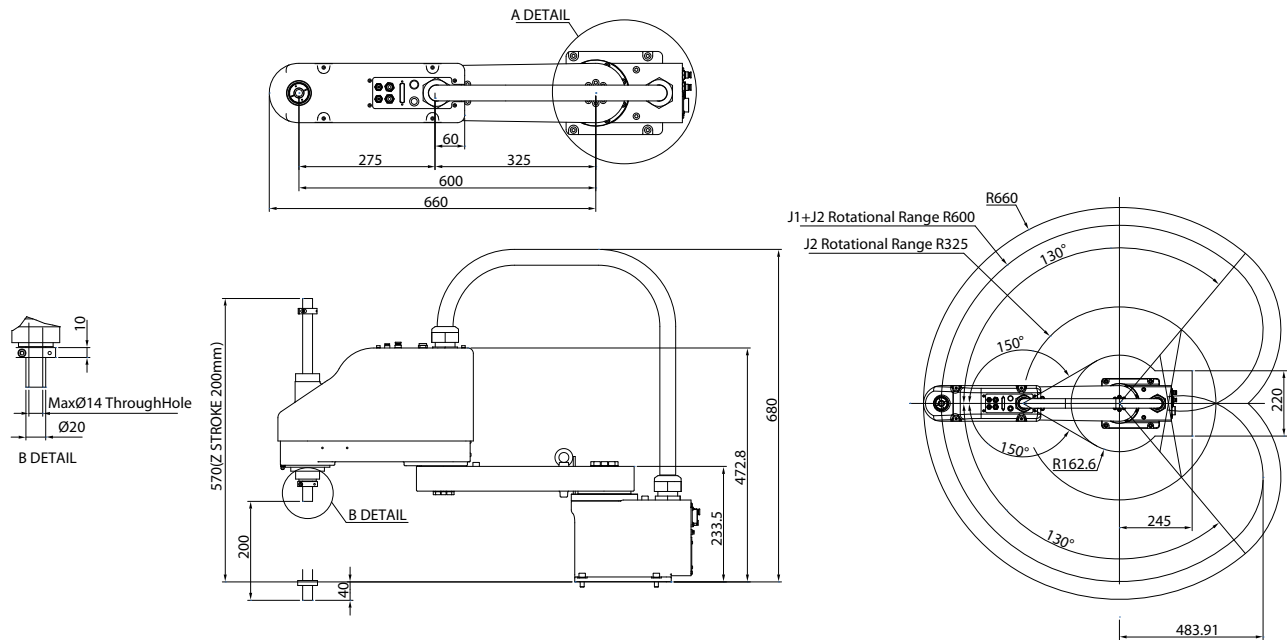
Robot Package

- ♦ NexROBO SCARA Edu Package (P/N: TBC)

Optional

- ♦ Robot Stand (P/N: TBC)
- ♦ Teach Pendant (P/N: TBC)

Robot Operating Space



Software Architecture

