



Contents

- Delta Robot Body Mounted in a Cupboard
- Servo Motors and Wiring Circuit
- Open Robot Controller

Product Overview

EtherCAT-based NexROBO Edu package provides an open programming environment for users to develop their own robot control. A three-joint delta is mounted in the cupboard along with robot controller. Motor drives, I/O signals and related circuits are all integrated based on EtherCAT control network. Point-to-point movement 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: 3
- Nominal load capacity: 0.5kg
- Motion Range
 - Horizontal stroke: 250mm
 - Vertical stroke: 100mm
- Position repeatability: ± 0.02 mm
- Operation Speed: 2m/s (unloaded)

Controller

- Intel® Atom™ processor E3826 Dual Core 1.46 GHz processor pre-installed
- 4GB DDR3 SDRAM, pre-installed
- 128GB SSD
- 1 x EtherCAT port
- 1 x Intel® GbE LAN port
- 1 x DVI display output
- 1 x VGA display output (converted from DVI-I to VGA adapter)
- 1 x USB 3.0 & 1 x USB 2.0 ports
- 1 x CFast socket
- 1 x SIM card holder
- 2 x RS232/422/485 with 2.5KV isolation protection, support auto flow control

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)
- GUI Example (C# project)

Ordering Information

Robot Package

- **NexROBO miniDelta Edu Package (P/N: TBC)**

Optional

- **Conveyor System (P/N: TBC)**
- **Vision Inspection System (P/N: TBC)**
- **Teach Pendant (P/N: TBC)**

Software Architecture

