



## 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:  $\pm 0.02$  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)**