NexROBO 6R Edu Package

Contents

- Articulated 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 six-joint articulated 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 freedon: 6
- Nominal load capacity: 5kg
- Motion Range
  Maximum reach radius: 710mm (Point P)
  J1: ±165°
  J2: +85°~-125°
  J3: +185°~-55°
  J4: ±190°
  J5: ±115°
  J6: ±360°
- Position repeatability: ±0.02 mm
- Cycle time: 0.5 s
- Weight: 40 kg
- Installation: Floor, ceiling, wall-mounting

Controller

- Intel® Core™ i5-3610ME processor pre-installed
- 2 x 2GB DDR3 SDRAM, pre-installed
- 500GB HDD
- 1 x EtherCAT port (Intel® 82574L)
- 1 x Intel® GbE LAN port
- 2 x Display Ports and 1 x VGA or 2 x Display Ports and 1 x DVI-D
- 4 x USB 3.0 & 2 x USB 2.0 ports
- 1 x CFast socket
- 5 x RS232 & 1 x RS232/422/485 with Auto Flow Control

Programming

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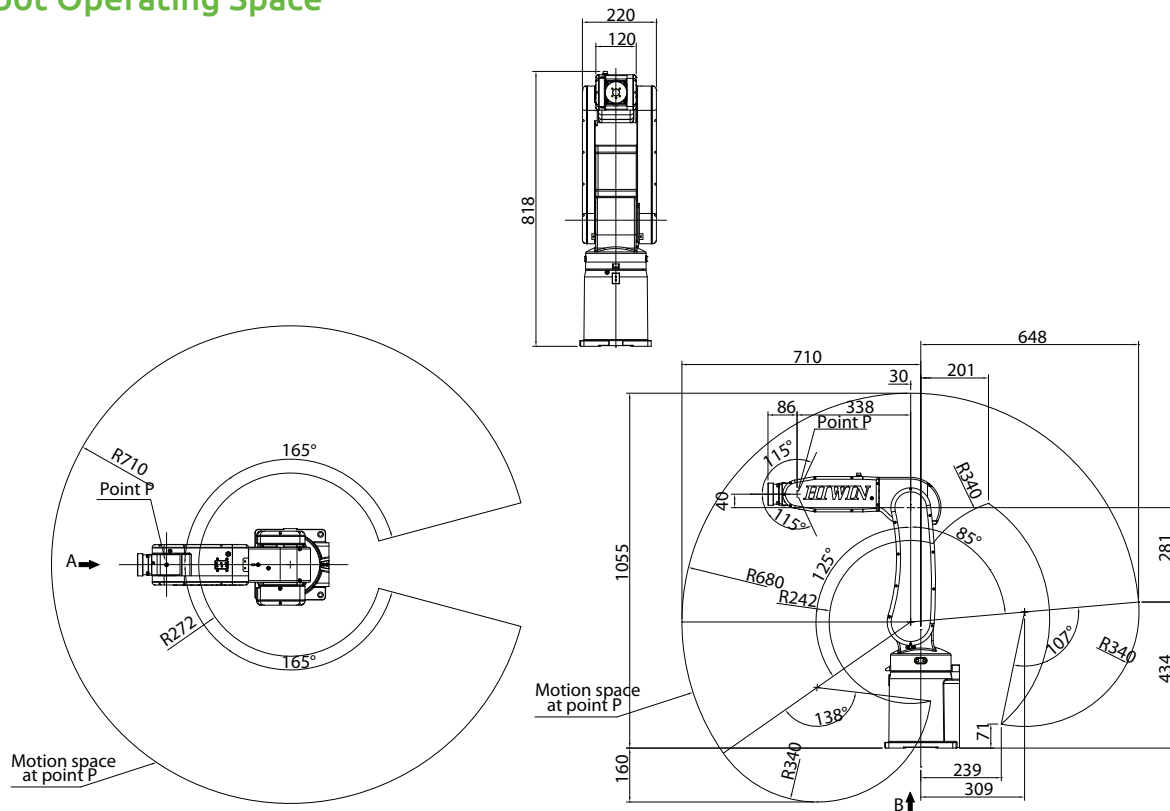- GUI Example (C# project)

Ordering Information

Robot Package

- **NexROBO 6R Edu Package (P/N: 7900000115X00)**

Optional

- **Robot Stand (P/N: 7900000160X00)**

- **Teach Pendant (P/N: TBC)**

Robot Operating Space

Software Architecture

HMI Example C#	C/C+ VB/C#... Program	HMI Program	Windows
User Control APIs Example (Win32 DLL)			
Hoste Services (ShareMemory)			
User RT Application Example C/C++			RTX
NexRobotkernet (Lib) nexROBO			
NexECMRtx nexECM			

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