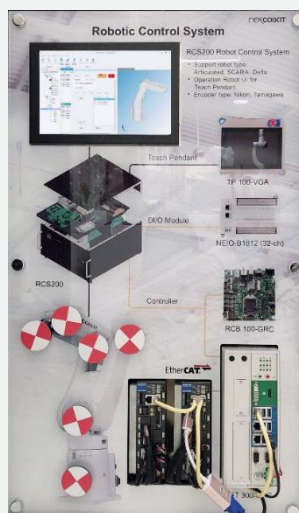# General Robot Control Solution Pack

Main Features

- Built-in NexGRC software
- EtherCAT communication
- Provides Windows API for development
- Powerful Utility: NexMotion Studio

Product Overview

NexCOBOT provides a comprehensive EtherCAT-based robot control solution, including control hardware such as robot controller, slave I/O modules and teach pendant. NexCOBOT's general robotic control software, NexGRC, performs real-time robot control and supports multiple robot types such as articulated robot, SCARA robot, and Delta robot.

The General Robot Control Solution Pack consists of one robot controller and six EtherCAT servo motors to simulate a 6-axis robot. The pre-installed powerful utility–NexMotion studio provides 3D view function so that users can preview the robot operation without robot equipment.

Specifications

Solution Scenario

❶ NexGRC software

❶ NexGRC Software
- Real-time robot control software
- User can operate their robot arm at operation or simulation mode
- 3D View function to preview the operate of the robot

❷ NET300-GRC
- High-performance general robot controller
- Built-in NexGRC software
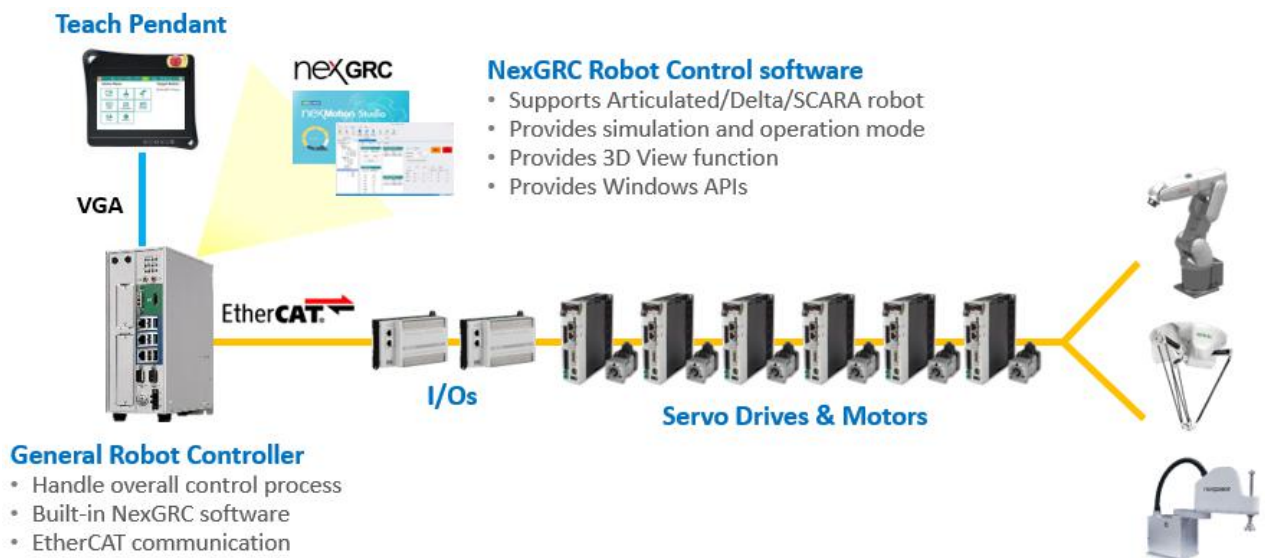- 1ms cycle time

❸ Servo Drives & Motors
- Receive command from NET300-GRC and control motors

❷ NET 300-GRC

❸ Servo Drives & Motors

Solution Pack Configuration

• Robot Controller: NET 300-GRC
- Intel® 6th Core™ i5-6500TE processor
- 256GB SSD, 4GB memory
- Dual independent display (HDMI, DVI-D)
- CE/FCC Class A
- Support standard EtherCAT salve devices

• Robot Control Software: NexGRC
- Support Articulated/Delta/SCARA robot
- Support up to 4 axes groups
- Robot group control functions: PTP/Line/3D arc
- Robot blending motion: aborting/buffered/blending
- Support extension single axis up to 16 axes
- Single axis control functions: PTP/Jog/Halt/Stop
- Single axis blending motion: aborting/buffered/blending
- Single axis override functions: position/velocity/acceleration/deceleration
- Provides Windows API
- Powerful Utility: NexMotion Studio

Solution Architecture

Teach Pendant

nexGRC

NexGRC Robot Control software
• Supports Articulated/Delta/SCARA robot
• Provides simulation and operation mode
• Provides 3D View function
• Provides Windows APIs

VGA

EtherCAT.

I/Os

Servo Drives & Motors

General Robot Controller
• Handle overall control process
• Built-in NexGRC software
• EtherCAT communication

Target Application

• Robotic production line
• Warehouse system
• Smart factory

Dimensions

• 50 (W) x 85 (L) x 15 (H) cm

Ordering Information

• **General Robot Control Solution Pack**
P/N (TBC)