SCARA Robot Solution

Open and Modular Solution
For SCARA Robot

nexCOBOT
Open Robots & Machines

www.nexcobot.com

Robot Operating Space

Main Features

- High accuracy transmission
- Fast speed and wide range
- High position repeat accuracy
- Anticollision system
- Concise operation interface
- Fault self-detection

Product Overview

The NexCOBOT SCARA is an assembly robot that installs parts or carries items. It is designed to mimic the action of a human arm and perform high accuracy jobs from automobile factories to underwater construction. This robot is frequently utilized because of its speed, efficiency, and low cost. Its arm is rigid in the Z-axis and pliable in the X and Y axes which allows it to adapt to holes in the X and Y axes.

This feature is perfect for many types of assembly operations, such as inserting a round pin in a round hole without binding. The NexCOBOT SCARA's motor drives, I/O signals, and related circuits are all integrated based on the EtherCAT control network. The I/O and motor control can easily be expanded through EtherCAT communication.

Specifications

Robot
- Degree of freedon: 4
- Nominal load capacity: 3kg
- Motion range
  Maximum reach radius: 600mm
  J1: ±135°
  J2: ±135°
  J3: 200mm
  J4: ±360°
- Position repeatability
  J1+J2: ±0.02 mm
  J3: ±0.01 mm
  J4: ±0.01°
- Normal cycle time: 0.6 s
- Weight: 20 kg
- J3 (Z-axis) push force: 100N
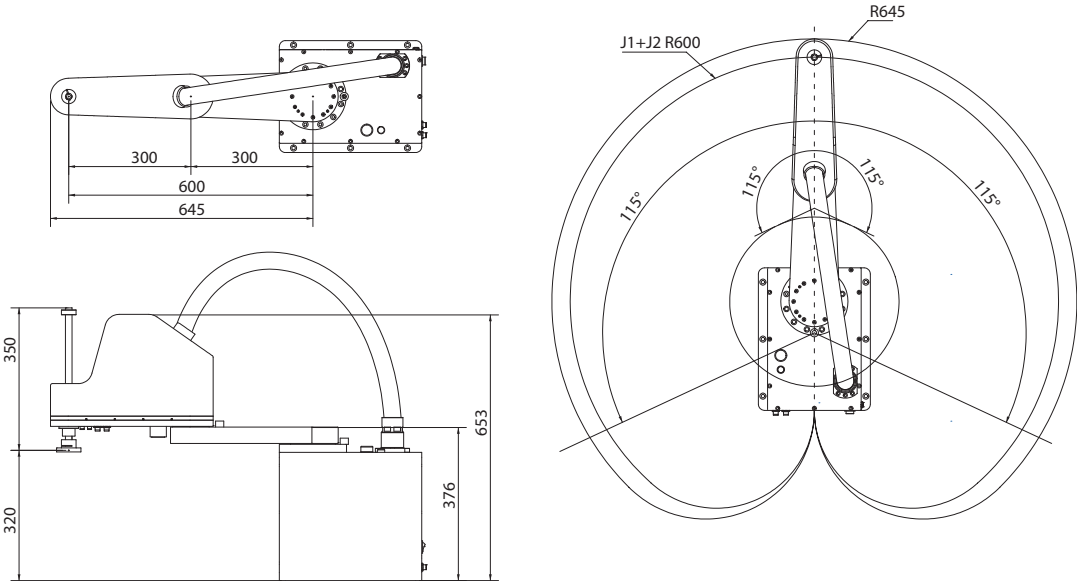- Installation: floor, wall-mounting/275*300mm

Controller
- Intel® Core™ i5-7500 CPU
- 1×4GB DDR4 SDRAM, pre-installed
- 500GB HDD
- 1 x EtherCAT port
- 1 x Intel® GbE LAN port
- 1×RS232
- 4×USB2.0 / 2×USB3.0
- 1×HDMI

Programming
- Language: visual C/C++
- Command set: positon command, velocity command, torque command
- Parameters: position, velocity, torque
- RT example (RTX project)

Ordering Information

- **SCARA ROBOT NGL-4B-600 (P/N: 10J00100012XX)**
  4-axis SCARA Robot Arm 5KG payload

Software Architecture