Detailed Specifications

Robotic Arm - SCORA-ER 4u

Mechanical structure	Vertically articulated
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 Weight
 10.8 kg
 23.8 lb

 Operating radius
 610 mm
 24"

Maximum Payload

With reduced acceleration: 2.5 Kg 5.5 lbs Full speed: 1 Kg 2.2 lbs

DC servo gripper, with optical encoder, parallel finger motion

End Effectors Measurement of object's size by means of Gripper sensor and

software.

Max. gripper opening

 Without pads
 75 mm
 3"

 With pads
 65 mm
 2.6"

Repeatability at TCP (tip of gripper) $\pm 0.18 \text{ mm}$ 0.007"

Position Feedback Optical encoders on each axis

Homing Fixed position on each axis found by means of micro switches

Actuators 12 VDC servo motors

Transmission Gears, timing belts, lead screw

Ambient operating $2^{\circ} - 40^{\circ}\text{C}$ $36^{\circ} - 104^{\circ}\text{F}$ temperature

Axes Specifications

Number of Axes	5 rotational axes and gripper
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Axis Movement	Range	Effective Speed
Axis 1: Base rotation	310°	20°/sec
Axis 2: Shoulder rotation	158°	26.3°/sec
Axis 3: Elbow rotation	260°	26.3°/sec
Axis 4: Wrist pitch	260°	83°/sec
Axis 5: Wrist roll	Unlimited mechanically±570° electrically	106°/sec