



SCARA

Technical Specifications | Rev 0

The SCARA is ideal for desktop pick and place applications requiring a low footprint and a wide reach.



General

ID	B075-ROBO-SCARA
Part Name	6 Axis Collaborative SCARA
Series	C
Features	Collaborative Online & Offline Programming Interchangeable Toolhead 1 kHz Motion Control
Programming	3D Interactive Programming via Composer in the Browser



Performance

Power Consumption (Nominal)	200 W (typical use case)
Max Loudness	60 dB(A)
Payload	8 kg (26.45 lbs)
Tip Precision	± 0.04 mm (± 0.002 in)
Tip Speed	1 m/s
Max Joint Speed	120 deg/s
Nominal Lifetime	15,000 hours



Operating Environment

Ingress Protection	IP54
Operating Temperature (Rated Limits)	0-45°C (32-113°F)



Characteristics

Degrees of Freedom	6
Footprint	120 mm x 120 mm (4.72 in x 4.72 in)
Reach	909 mm (35.79 in)
Joint Ranges	A1 $\pm 360^\circ$ A2 $\pm 360^\circ$ A3 $\pm 360^\circ$ A4 $\pm 360^\circ$ A5 $\pm 360^\circ$ A6 $\pm 360^\circ$
Weight	10.2 kg (22.48 lbs)
Material	Aluminum & Stainless Steel
Master Controller (MC) Dimensions	332 mm x 195 mm x 114 mm (13.07 in x 7.68 in x 4.49 in)



Interfaces

Communications	RESTful HTTP API & Websockets
Cabling	MC to Robot 3m (9.84 ft) MC to Mains 2m (6.56 ft)
Tool Electrical Interface	8 Position IEC 61076-2-104-M8
Tool Mechanical Interface	9409-1-50-4-M6
Tool Power	24 VDC / 2 Amp
Tool Communications	RS-422 / RS-485, 3x Analog Input
MC Supply Voltage	110-240 VAC (50-60 Hz)
MC Supply Interface	IEC 60320
Base Power Interface	XT60

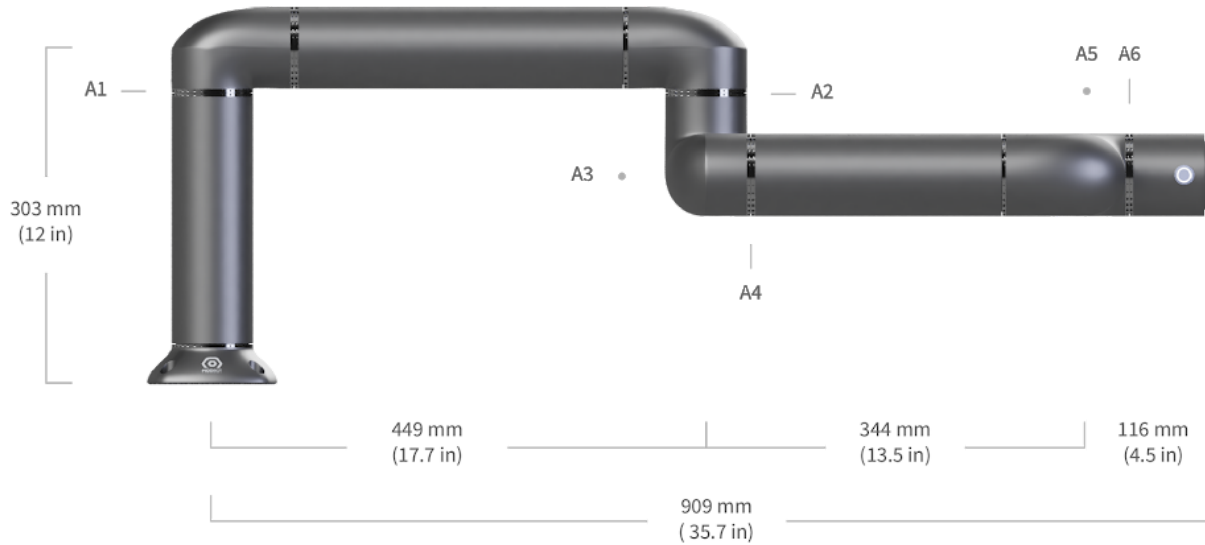
Questions?

Email hello@modbot.com



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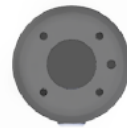
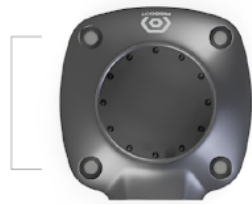
Arrows indicate positive joint direction.
Robot at bottom shown in zero position.



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M8 mounting holes spaced 80 mm apart
make the Base 80/20 compatible



ISO 9409-1-50-4-M6 standard
interface on the HMI Module makes it
compatible with most end of arm
tools

Robot Power
Robot Comms



HMI Button on the HMI Module gives
feedback on the state of the robot as
well as serving as an input mechanism
for teaching and setting waypoints



DIN Rail and 80/20 Mountable



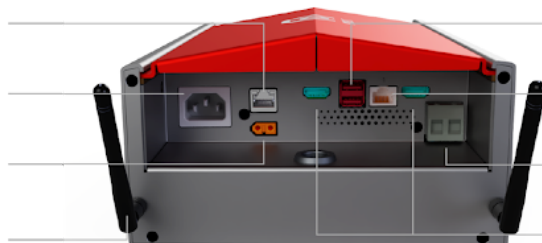
HMI Button with LED Feedback
Robot LED
CPU LED
Power LED
Lockout Tagout Power Switch

External Comms

Supply Interface IEC 320 Power

Robot Power 48 V DC, 10 A, XT60

Wifi Antennas



USB
Robot Comms
Emergency Stop
HDMI