



# Cobot

Technical Specifications | Rev 0 | Draft

Configuration meets collaboration with our six degree of freedom Cobot. This robot can work safely alongside humans, be taught kinesthetically, and be extended with a Modbot gripper as an out of the box solution.



## General

ID	B075-ROBO-6DOF
Part Name	6 Axis Collaborative
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	5 kg (11.02 lbs)
Tip Precision	$\pm 0.04$ mm ( $\pm 0.002$ 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	796 mm (31.3 in)
Joint Ranges	A1 $\pm 360^\circ$ A2 $\pm 360^\circ$ A3 $\pm 165^\circ$ A4 $\pm 360^\circ$ A5 $\pm 360^\circ$ A6 $\pm 360^\circ$
Weight	9.3 kg (20.5 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

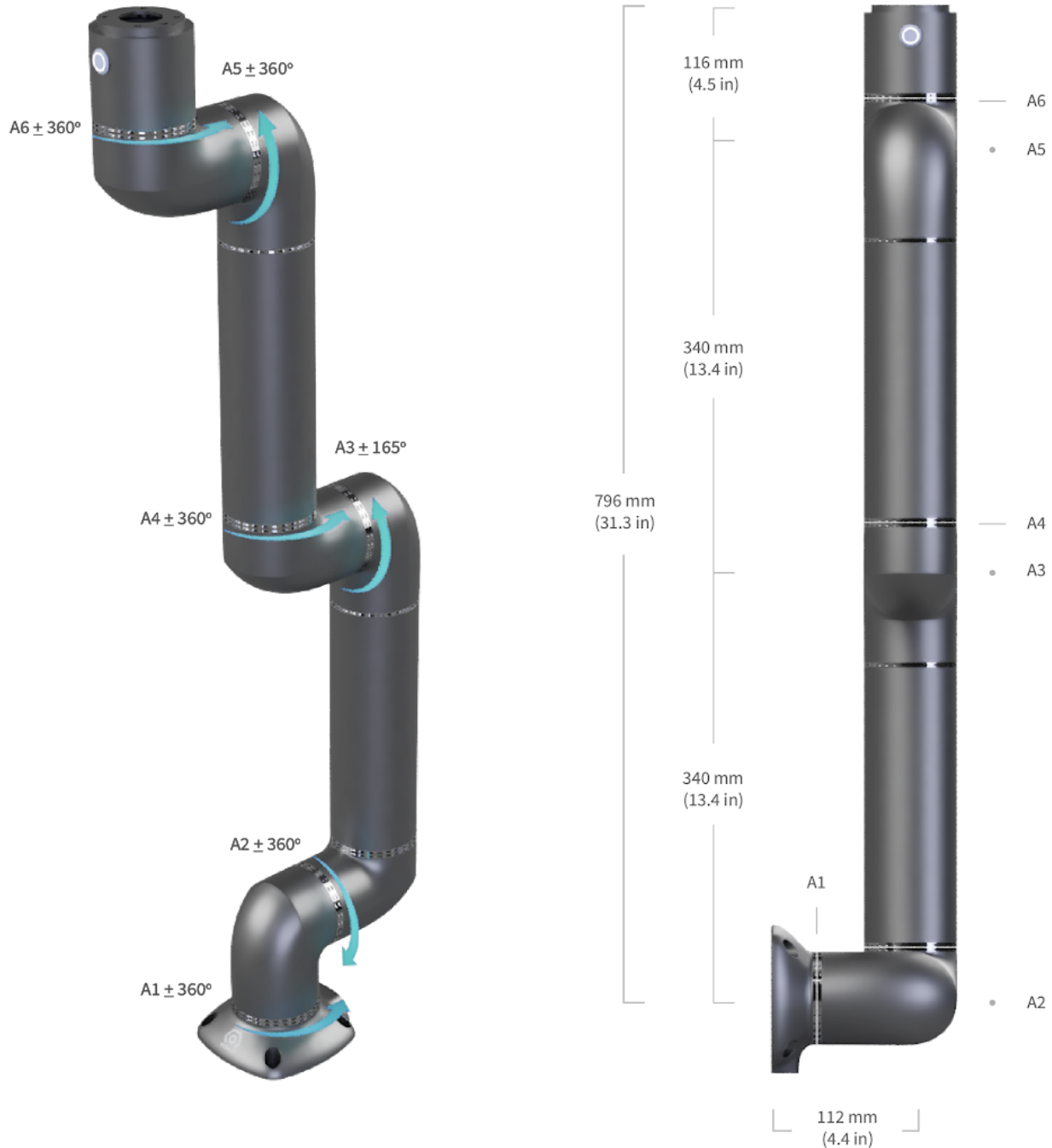
Questions?

Email [hello@modbot.com](mailto:hello@modbot.com)



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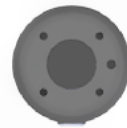
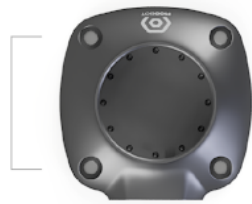
Arrows indicate positive joint direction.  
Robot on left shown in zero position.



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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



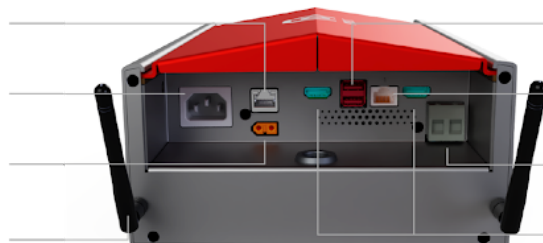
HMI Button on the HMI Module gives  
feedback on the state of the robot as  
well as serving as an input mechanism  
for teaching and setting waypoints

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