

YARO COBOTS

Technical Specifications

YARO Cobot by YardStick Robotics (a Rheinmetall company) works where others can't — outdoors, offshore, underground, even in space. Built for harsh, unpredictable environments, it handles dangerous tasks humans shouldn't, enabling a new generation of robots for real-world applications.



	YARO-1603	YARO-1105	YARO-0810	YARO-1115	YARO-1310	YARO-0820
Payload	3 kg	5 kg	10 kg	15 kg	10 kg	20 kg
Reach	1600 mm	1100 mm	800 mm	1100 mm	1300 mm	800 mm
Protection class	IP 67 & IP 69					
Operating temperature	-20° to 50°					
Repeatability	< 0.1 mm (ISO 9283)					
DOF	6					
EEF speed (max)	1m/s					
Mechanical brakes	In all joints					
Torque measurement	Yes					
Force /Torque Sensing	Yes, prepared for 6-DOF sensor at wrist					
Tool flange	ISO 9409					
Interfaces	24V DC / 2 A, MODBUS RTU (free, e.g. for optional Gripper), 100Base Ethernet (free, e.g. for optional Camera)					
Conformity	ISO 10218-1, ISO 13849-1, Cat.3 PL d					
Robot mounting	Any orientation					
Weight	46 kg	30 kg	28 kg	41 kg	45 kg	36 kg
Power consumption	450 W (avg) 1050 W (max)	350 W (avg) 850 W (max)	350 W (avg) 850 W (max)	500 W (avg) 1200 W (max)	500 W (avg) 1200 W (max)	500 W (avg) 1200 W (max)

**Technical details and features are customizable upon specific request and subject to changes during development*

	YARO-1603	YARO-1105	YARO-0810	YARO-1115	YARO-1310	YARO-0820
Working Range						
Axes						
A1	+/- 360 deg	+/- 360 deg	+/- 360 deg	+/- 360 deg	+/- 360 deg	+/- 360 deg
A2	+/- 360 deg	+/- 360 deg	+/- 360 deg	+/- 360 deg	+/- 360 deg	+/- 360 deg
A3	+/- 360 deg	+/- 160 deg	+/- 160 deg	+/- 160 deg	+/- 360 deg	+/- 160 deg
A4	+/- 360 deg	+/- 360 deg	+/- 360 deg	+/- 360 deg	+/- 360 deg	+/- 360 deg
A5	+/- 360 deg	+/- 360 deg	+/- 360 deg	+/- 360 deg	+/- 360 deg	+/- 360 deg
A6	+/- 360 deg	+/- 360 deg	+/- 360 deg	+/- 360 deg	+/- 360 deg	+/- 360 deg
Maximum Speed						
Axes						
A1	120 deg/s	240 deg/s	240 deg/s	120 deg/s	120 deg/s	120 deg/s
A2	120 deg/s	240 deg/s	240 deg/s	120 deg/s	120 deg/s	120 deg/s
A3	288 deg/s	288 deg/s	288 deg/s	240 deg/s	240 deg/s	240 deg/s
A4	288 deg/s	420 deg/s	420 deg/s	288 deg/s	288 deg/s	288 deg/s
A5	420 deg/s	420 deg/s	420 deg/s	288 deg/s	288 deg/s	288 deg/s
A6	420 deg/s	420 deg/s	420 deg/s	288 deg/s	288 deg/s	288 deg/s

	Control unit
Dimensions	500 x 400 x 200 mm
Operating Voltage	230V AC
Power Consumption	Overall including arm supply: 280 W (avg), 650 W (max)
Protection Class	IP65
Interfaces	2x Ethernet (free for user), EtherCAT for Arm control, Analog and Digital I/Os (up to 16 flexible configurable), RFID Interface for access control
Communication	Ethernet (1 kHz Control Frequency), further comm. protocols on request
Programming	Intuitive GUI, ROS 2
Weight	13,5 kg
Emergency Stop	Wireless + Wired, Safety-Certified (Cat.4/ Ple, SIL3)

	Tech pendant
Dimensions	380 x 240 x 70 mm
Screen Resolution	2304 x 1440
Cable	No
Communication	Wireless
User Interface	Intuitive Programming GUI
Protection Class	IP 67
Emergency Stop	Wireless, Safety-Certified (Cat.4/ Ple, SIL3)
3-position Switch	Safety-Certified (Cat.4/ Ple, SIL3)


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