RTP
ROBOTICS
Innovation, Science and Technology

ARMTIN10
RTP Robot Manipulator

Precise, Sensitive & Flexible

Used in:
- Assembly
- Packing
- Inspection
- Part Transfer
- Machine Tending
- Injection Molding

Payload: 10 kg

ARMTIN10

www.rtRobotic.com/ARMTIN10/

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7 reasons to buy

1 Slim, 6-axis design optimizes space; provides "human-like" flexibility and range of motion, even in tight spaces

2 Different programming platforms, such as ROS, MatLab, LabView, PLC, Ladder and Motion programming

3 Mounts virtually anywhere in any orientation

4 Can be used in environments that are hazardous to humans

5 Labor savings justifies capital investment

6 High resolution of control in joint axes

7 Zero backlash between axes

ARMTIN10 Arm

- 6-axis actuator-based design and best-in-class wrist performance characteristics provide amazing freedom of movement, coupled with ability to maneuver in very tight areas.

- Agile, versatile robot opens up a wide range of industrial applications to robots: ideal for assembly, injection molding, inspection, machine tending and a host of other operations.

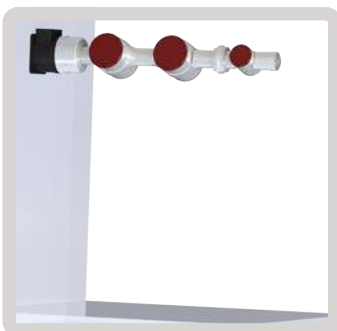- 10 kg payload; 1,228 mm vertical reach; 824 mm horizontal reach; ±0.1 mm repeatability.

- Short axis lengths and extreme motion flexibility allow slim manipulator to be positioned out of normal working area (i.e. floor-, ceiling-, wall-, incline- or machine-mounted) without limiting motion range of any axis.

Floor-Mounted

Wall-Mounted

Ceiling-Mounted

- Mounting ARMTIN10 robot between two machine tools provides open access to machines for fixture maintenance, adjustment or testing.

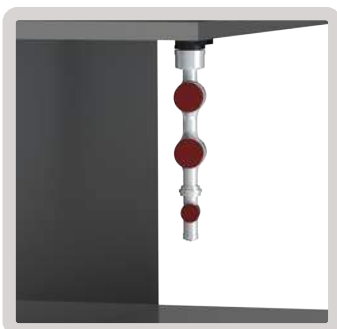- Operator has clear access to machine operator station for entering offsets, maintenance or other operations.
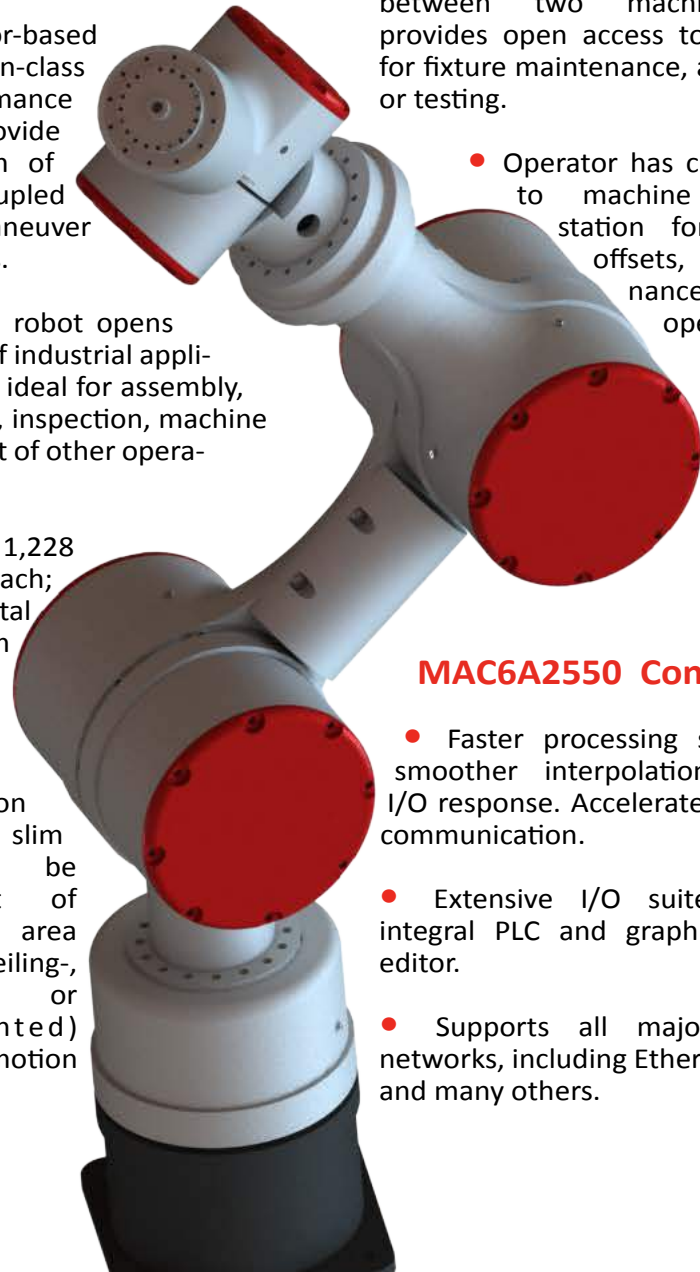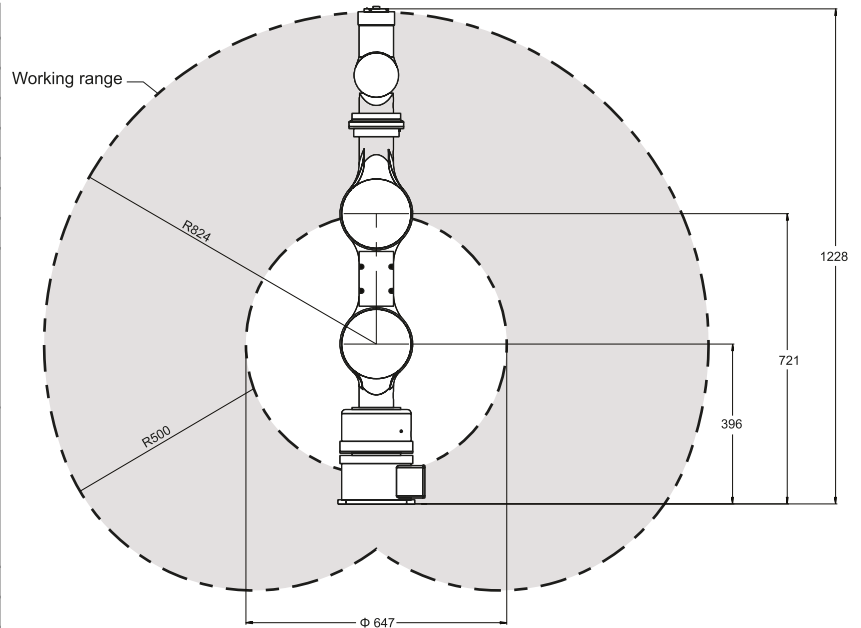
MAC6A2550 Controller

- Faster processing speeds for smoother interpolation. Quicker I/O response. Accelerated Ethernet communication.

- Extensive I/O suite includes integral PLC and graphical ladder editor.

- Supports all major fieldbus networks, including EtherNet, RS232 and many others.

ARMTIN10
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ARMTIN10 Specifications

Structure		Articulated
Mounting		Floor, Wall or Ceiling
Controlled Axes		6
Payload		10 kg (22.1 lbs)
Vertical Reach		1228 mm (48.3")
Horizontal Reach		824 mm (32.4")
Repeatability		±0.1 mm (±0.004")
Maximum Motion Range	S-Axis (Turning/Sweep)	±180˚
	L-Axis (LowerArm)	±110˚
	E-Axis (Elbow)	±150˚
	U-Axis (Upper Arm)	±135˚
	B-Axis (Bend/Pitch/Yaw)	±110˚
	T-Axis (Wrist Twist)	±150˚
Maximum Speed	S-Axis	170˚/s
	L-Axis	170˚/s
	E-Axis	170˚/s
	U-Axis	170˚/s
	B-Axis	200˚/s
	T-Axis	400˚/s
Approximate Mass		60 kg (132.3 lb)
Power Rating		3kVA
Allowable Moment	R-Axis	31.4 N · m
	B-Axis	31.4 N · m
	T-Axis	19.6 N · m
Allowable Moment of Inertia	R-Axis	1 kg · m²
	B-Axis	1 kg · m²
	T-Axis	0.4 kg · m²

Working range

R824
R500
1228
721
396
Φ 647

165
165
343
229
229
1228
324
396
Φ 172
190

MAC6A2550 Controller Specifications

Dimentions (mm)	600 (w) x 900 (h) x 600 (d) (23.6" x 35.4" x 23.6")
Approximate Mass	50 kg (110.2 lbs)
Cooling System	Air cooling
Ambient Temperature	During operation: 0˚ ~ 45˚ C (32˚ ~ 113˚ F)
	During transit and storage: -10˚ ~ 60˚ C (14˚ ~ 140˚ F)
Relative Humidity	%90 max, non-condensing
Primary Power Requirements	-1phase, 220V at 50 Hz
Digital I/O	8 DIO
Position Feedback	By absolute encoder
Program Memory	JOB: 200,000 steps, 10,000 instructions
	CIO Ladder Standard: 15,000 steps, Expanded: 20,000 steps
Interface	One compact flash slot; One USB port (1.1)
Programming Language	INFORM III, menu-driven programming
Maintenance Functions	Displays troubleshooting for alarms, predicts reducer wear
Number of Robot/Axes	Up to 6 axes
Multi Tasking	Up to 16 concurrent jobs, 4 system jobs
Fieldbus	Ethernet
Ethernet	10 Base T/100 BaseTX
Safety	Dual channel emergency stop pushbuttons, 3-position enable switch, manual brake release Meets ANSI/RIA R15.06-1999, ANSI/RIA/ISO 1028-1- 2007 and CSA Z434-03

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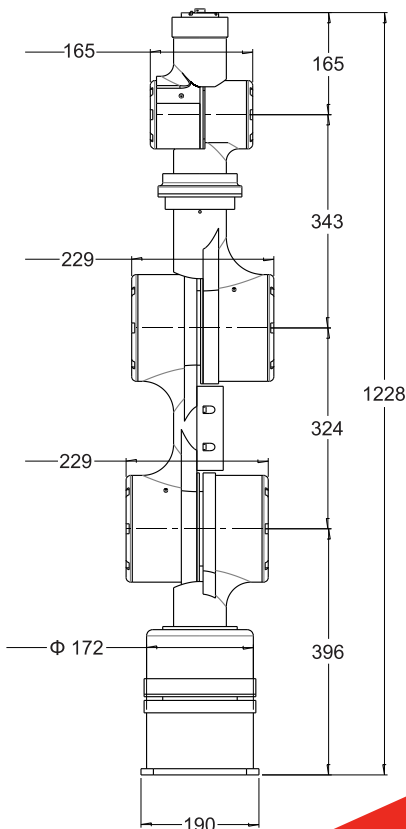
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