



WTM-511 WetBot™ Splash-proof Wafer Handling Atmospheric Robot

Features:

- *Top mount design for inverted operation*
- *Designed for handling wafers up to 300mm*
- *Vertical travel of 17"*
- *Z Brake*
- *Reach up to 22.6" plus flipper and end effector*
- *Wet Servo Flipper*
- *Flipper can place wafers at any angle between 0°-180°*
- *Compact footprint*
- *Macro Programmable*
- *Intelligent commands*
- *Production and field proven design*
- *Splash-proof design*
- *Chemical and DI water resistant finish*
- *Self-purging vacuum wafer holding system*

PRI/OEM Systems now offers a splashproof, corrosion-resistant version of our industry standard ATM robot. The WTM-511 (Wet Top Mount) WetBot™ is specifically designed for use in CMP process tools and other wet process semiconductor equipment. Based on our high reliability ATM (Atmospheric Top Mount) robot and controller, the WetBot™ is designed to operate flawlessly and reliably.

To resist corrosion, all exterior surfaces are finished with a chemical and DI water-resistant finish. Special chemical-resistant vacuum tubing, sealed arms, and stainless steel fittings all help to make this robot reliable and repeatable in wet corrosive environments. A self-purging vacuum circuit is standard to ensure trouble free wafer transfer.

The WTM-511 WetBot™ robot retains the same time-proven quality and features that make PRI Automation's Atmospheric robot an industry favorite. Each robot is controlled by the ESC-200 Series controller, with user-customizable macro commands.



PRI/OEM Systems provides an extensive worldwide customer support network. Our Application Engineers will assist your engineering group with the initial integration of our equipment into your system. Telephone support is available through our Technical Support Group, 24 hours 7 days a week. We offer training classes tailored to your application, extended warranty packages and on-site service contracts. Contact our Customer Support Department at 1-888-775-7700.

When it comes to OEM wafer handling robots, PRI has more production experience than all other American manufacturers combined. Our world-class manufacturing facility and flexible manufacturing systems can quickly accommodate your company's production requirements. Please call or e-mail for more information or a demonstration and tour of our facility.



WTM-511 WetBot™ Splash-proof Wafer Handling Atmospheric Robot

General Specifications:

Payload	Maximum of 4 lbs.	
Weight	80 lbs.	
Substrate Sensors	Vacuum	
Cleanliness	Class 1	
Throughput	< 4 seconds / wafer / pick and place < 1 second / 180° flip	
Z-Drop	< 0.040" in the event of servo off	
MTBF	25,000 hours (goal)	
Utilities Required	Vacuum:	18-24 inches Hg
	Purge:	20-25PSI CDA or N2
	Power:	100/120/220/240 VAC, 50/60 Hz.

*Vacuum Sensor Set Point - 17" Hg

Mounting Specifications:

Robot Hole Diameter	11.500"
Robot Bolt Pattern	3x1/4-20 on diameter 12.350"
End Effector at Flipper	2x6-32 on diameter 0.400"
Dead Zone	25°

Axes Specifications:

	Radial Axis	Theta Axis	Z Axis
Range of Motion	22.6"	335°	17"
Repeatability	± 0.006" @ 3s	± 0.006" @ 3s	± 0.004" @ 3s
Flipper Repeatability	± 0.03° @ 3s		
Speed	24 inches/sec	360°/sec	12 inches/sec



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