


**AutoXing® AX1612 MARS Smart Restaurant Robot**

Picture		
Basics	Height	1290mm
	Size	580*490mm
	Weight	66kg
	Exterior material	Flame Resistance ABS
Layer	Tray	4 tiers
	Layer height	200mm
	Detachable	Yes
	Size	430*400mm
	Load	Each layer 10-20kg
Use Environment	Water-proof & Dust-proof	Whole body IP43, battery IP66
	Working life	8h/day, 5years, 63072km
	Operating temperature	-10 ℃ ~ 65 ℃; UV resistance; Corrosion resistant
	Storage temperature	-20℃~65℃
	Charging temperature	5~40℃ (indoor)
Display	10.1 inch, MIPI, 1280*720	
Advertising Screen	15.6 inch, EDP, 1920*1080	
Network Communication	4G	Support FDD B1/B3/B5/B8, TDD B38/39/30/41
	5G	Supported, need to add 5G accessories
	WIFI	Wifi module (AP6256) 2.4G&5GHz, support 802.11a/b/g/n/ac protocol
OS	Android 8.1+ Linux	
Sensors	Ultrasonic sensor*2	Detect glass and other transparent materials
	RGBD camera*2	detect more obstacles with a certain height that cannot be detected by LiDAR
	LiDAR*1	Detect obstacles with a certain height in 360
	Fisheye camera*1	215°FOV, resolution 640*480, capture visual features of the environment
Charging & Battery Life	Battery	Charging voltage: 24V
		Capacity: 15Ah
		Duration: 10h
		7*24h service can be achieved with the charging
		Time to fully charge: 4h
	Adapter	Working voltage: 100~240VAC, 50/60Hz
		Size: 375mm*160mm*355mm
	Charging pile	Weight: 4.35kg
		Input: 100-240V~50/60 Hz
		Output: 29.4V==7.0A
LiDAR	LiDAR	Support SLAM algorithm
		Sampling frequency: 4500 times/s
		Measuring range: 10m
		Scanning speed: 10Hz
		Scanning scope: 360° (6m-12m)
Visual	Visual recognition	FOV166° Fisheye Camera*1 1.5m
	RGBD	RealSense D410(Intel)Camera x2
Control	GPU	ARM® Cortex™-dual core Cortex-A72 1.8/2.0GHz; quad-core Cortex-A53 1.4GHz
	Ram	4GB
	Rom	binary channels LPDDR4
	DSP	32GB high speed eMMC
	CPU	Rasberry pi CM4
	Image processing	ARM® Cortex™-dual core Cortex-A72 1.8/2.0GHz; ARM® Mail-T860MP4 GPU
		OpenGL ES 1.1/2.0/3.0, OpenCL 1.2, Directx 11
		Embedded high performance 2D acceleration
		H.264/H.265/VP9 up to 4Kx2K@60fps
		H.264/H.265 decoder supports 10bit decoding
		1080P multi-format video decoding, support H.264, VP8 and MVC
Firmware	LED	LED
	Emergency stop	Located at the top of the device, press it to trigger; Rotate to the right to release
	Speaker	8Ω15W
Performance	Velocity	0.3-1.2m/s
	Whether support outdoor operation	It can be used in the park zone that meets certain requirements.
	Obstacle climbing	17mm
	Slope climbing	8°
	Floor gap width	30mm
	Passage width	The passing width of the robot should be no less than 70cm
	Elevator width	75cm+
	Gate width	75cm+
Software	APP	APP remote management. Use the app program to send robot task, visualize task statistics functions.
	Robot management platform	Authorization allocation and business management of robot users; Operational data
	Remote monitoring platform	Real-time status monitoring; Real-time fault alarm and remote processing
	Remote deployment management platform	The robot can be deployed via remote mapping. Operators can scan and edit the map remotely.
	Remote scheduling management platform	Remote cross-space scheduling
	Real-time data visualization	Display real-time status and operational statistical analysis of robots in different businesses.