

AMY A1 Specifications

Hardware	Specifications
Size	45X51X110cm
Weight	15kg
Display	10.1 inch
Display Resolution	1280X800
Operation	Touch Screen and Speech
CPU	ARM1.2Ghz (Option 2.0GHz)+ intel J1900
Battery Capacity	19.8Ah
Voltage	14.8V
Laser Sensor	SICK TIM561 Range 10m, 270
Wheels	2XDrive+1 Caster, 2 Ball wheel
kinematics	Differential Drive
Terrian	Indoor floor, obstacles less than 1.5cm.
climbing capability	15°
Speaker	Stero HiFi Speeaker
Micro Phone Array	Noise Cancellation, 5m distance far-field voice pick-up
IMU	9 Degrees of Freedom High resolution
Wheel Encoder	500CPR
3D Camera	Vertical 50° , horizontal: 75°
Laser Scanner [Optional]	SICK Timx 576 or Hokuyo-UST 10LX
Body Motion	PIR, 0.8-1.5m range, 60° FoV.
Built-in Camera	500M Resolution, 720P
External Camera	Suggest:Logitech C920/C925E
Communication	WiFi+ WiFi AP
Bluetooth	Bluetooth 4.0
Features	

Mapping	Ready to use SLAM System.
Navigation	Autonomous navigation realtime dynamic planning
Obstacle Avoidance	3D dynamic obstacle avoidance and edge detection
Human Following	Follow human 0.6-2m to front of robot.
Auto-recharge	Return to charging dock when low power.
Autonomous patrol	Patrol with regard to pre-defined path.
Telepresence	Video Communication with remote control.
Human detection	Human detection and auto-activation.
Speech interaction Engine	Google ASR
ROS support	ROS drivers for robot control system.



