



AVA ROBOTICS

Introducing the Ava Mobile  
Robotics Base



# Ava Mobile Robotics Base

Ava Mobile Base is a breakthrough platform developed to help robot designers, application developers and market innovation specialists expedite the pursuit of practical mobile robotic solutions for commercial environments.

Ava goes beyond traditional localization, path planning and collision avoidance, using features such as omnidirectional mobility and dynamic obstacle detection to deliver elegant, human-like motion that makes workers and guests at the host site immediately comfortable with its presence and movements.

Its navigation includes intelligent behaviors which account for architectural features common in commercial environments: door detection and traversal, ramps behaviors, thresholds traversal, and more.



# Technical Specifications

Components	Ava Mobile Base Ava charging station Ava Cloud Service (optional)
Sensors	2D LiDAR, 2x 3D cameras, 4x cliff sensors, inertial measurement unit
Wireless Network and Protocols	Wi-Fi 802.11a/g/n 2.4GHz and 5GHz Dual WiFi radios for optimal roaming between access points Web proxy support
Mobility	Omnidirectional/Holonomic drive system Max speed 1 m/s Autonomous mobility Path planning Collision avoidance
Dimensions	Payload interface height 79.4 cm (31"¼) Max width 57.5 cm (22"½) Max depth 57.5 cm (22"½)
Batteries	2x or 4x Lithium Ion, 7300 mAh each Up to 11 hours of continuous operation (no payload power draw)



# Cloud Robotics and APIs

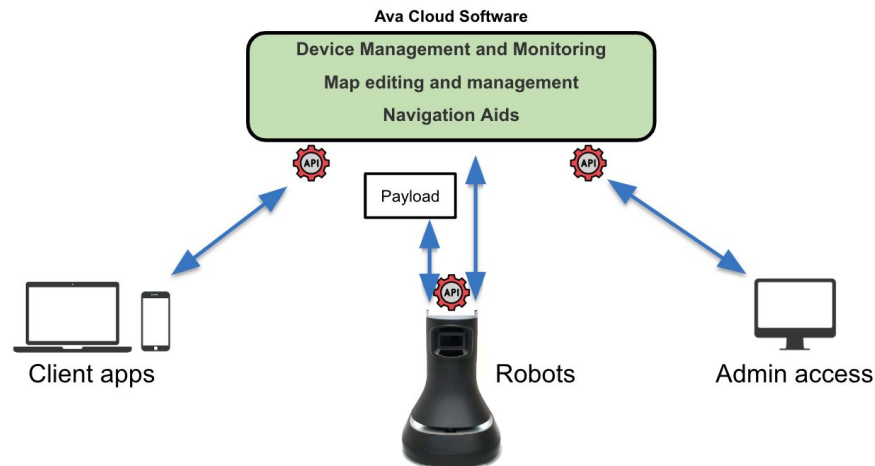
## Cloud Software

Cloud-based management and control of complete solution, including:

- Secure communication between robot and cloud
- Robot management and monitoring
- Map management
- Navigation aids

## APIs

Local and cloud-based APIs with easy-to-program Web Services interfaces, in HTTP.





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