AVA ROBOTICS

Introducing the Ava Robot

Ava Robot

Imagine enabling remote users to effectively collaborate anywhere with your teams, or conduct site visits. The Ava Robot makes it all possible.

At the heart of our solution is the Ava Robot. Remote users can easily and safely navigate through large offices, labs, factories, and showrooms. Enterprise-grade videoconferencing makes interacting with people on-site perfectly natural — and offers a crystal-clear view of the facility.

Learn how Ava Robots can create an unparalleled, immersive experience for your remote users.

Solutions

Ava Robots are ideal for the following use cases:

- Manufacturing, lab and supply chain environments: Improve situational awareness and collaboration in situations where remote expertise or supervision is helpful.

- Team collaboration: Empower employees, executives, consultants and others working off-site to engage and collaborate seamlessly with your teams.

- Site visits: Allow guests and customers to visit your hospitality, conference or customer experience center virtually and get a realistic sense of what the experience is like.

- Telemedicine: Provide remote medical consultations and examinations, allowing healthcare professionals to diagnose and treat patients from a distance.

- Security: From surveillance and threat detection to proactive incident response, Ava Robotics ensures a safe and secure environment for businesses and organizations.

Key Capabilities

Navigation and Mobility

The Ava Robot features intelligent, autonomous navigation. Remote users simply specify a destination, and Ava automatically moves to the desired location. Through advanced mapping technologies, Ava learns the local environment to create a realistic map of the area — no need for the remote user to know the layout of the location or drive Ava to its destination. Built-in collision avoidance allows the robot to safely navigate around people and objects without bumping into them, while cliff sensors prevent problems with stairs.

Enterprise-Class, Standards-Based Video Conferencing

Ava delivers HD videoconferencing of up to 1080p30 video resolution along with full-fidelity audio and is compatible with any standards-based videoconferencing infrastructure and devices. Embedded enterprise-grade security (including encryption, secure HTTPS management, password protection) makes Ava a trusted part of your corporate IT infrastructure.

Key Capabilities

Easy-to-Use Client Applications

Remote users control the Ava Robot via a client application running on an iPad, iPhone or PC/Mac via a web browser. During a visit, the remote user can adjust position, "sit" or "stand" and look up or down. A front camera provides the main view, while side cameras allow for peripheral vision.

Interactive capabilities let users orient their view by touching the image or by creating their own frame with a gesture on iOS devices. Alternatively, Ava can automatically optimize framing of any people within view, including moving closer for better interaction.

After a visit, the remote user ends the session and the Ava returns to its charging station automatically.

Key Capabilities

Management and Scheduling

The Ava Cloud Service provides management of robots and site information along with user administration. Each robot's status is monitored, and administrators receive proactive alerts about any potential issues. If remote users choose to reserve a session at a future time, the Ava Cloud Service will dispatch Ava to a destination up to 15 minutes ahead of the scheduled session.

Other Features

- A tilt-and-zoom camera lets remote users frame the appropriate view in various physical spaces, from looking at a presentation on screen to zeroing in on a detail of an object.

- Advanced wireless with dual Wi-Fi radios enables seamless, enterprise-grade connectivity and security along with optimal roaming.

- Automated patrols allow for dynamic presence with minimal effort on remote users.

Technical Specifications

Components	Ava Robot and its charging station Ava apps (iOS app, Web app, embedded Webex app) Ava Cloud Service
Display	21.5" diagonal LCD Resolution: 1920x1080 (16:9), Viewing angle: 178 degrees
Cameras	Main camera: • 1/2" 2MP CMOS sensor • 1080p 60fps/30fps, 720p 60fps • HFOV 88.4 degrees • 6x zoom Peripheral cameras (2x):720p • HFOV up to 185 degrees
Audio	High fidelity front-facing speaker. Integrated full-range microphone
Network and Protocols	Wi-Fi 802.11a/g/n, 2.4GHz and 5GHz Dual Wi-Fi radios for optimal roaming between access points Standards video calling via SIP Web proxy support
Video Conferencing Compatibility	Compatible with standards-compliant video systems
Navigation Sensors	LiDAR, 3D cameras, cliff sensors, inertial measurement unit
Mobility	Holonomic drive system Max speed 1 m/s Autonomous mobility Collision avoidance
Dimensions	Standing height 165 cm (65") Sitting height 134.5 cm (53") Max width 57.5 cm (22"⅝) Max depth 57.5 cm (22"⅝)
Batteries	Lithium Ion, up to six hours of continuous operation in typical use model