

Intelligent Mobile Robots

Robots that **know** where they're going.
Since 1995.

ARCSinside



MobileRobots Inc offers OEMs, integrators and dealers robust, reliable robot controls and bases with our revolutionary ARCSinside technology for autonomous navigation, localization, and interaction. With ARCSinside, you can add accessories, communicate with external systems, customize robot behaviors, add capabilities to the base platform, and manage entire teams of mobile robotic devices. Support is part of our training, integration, and installation process.

The ARCSinside robot “brain” enables companies with no intelligent AGV development experience to create a state-of-the-art autonomously navigating, location-aware mobile platform. AGVs with ARCSinside can automate processes previously handled manually with carts or bins.

There are no lines in the floor or triangulating devices to install with ARCSinside. Your AGVs will be up and running in minutes in most workspaces. Once installed, ARCSinside enables an entire fleet to behave the same, for maximum flexibility to scale operations as needed.

ARCSinside Control System: # BBX0001

*Advance Robotics Control System
(ARCSinside)*



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Integrators, and VARs
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OEMs, Integrators & Developers

PatrolBot AGV with ARCSinside

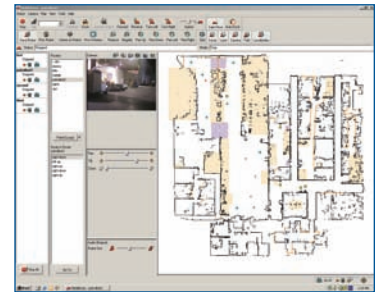
The PatrolBot AGV delivers up to 22kg from place to place on demand, on a route or on call from a third-party application. Available in standard or clean-room configuration, PatrolBot can handle ADA-compliant terrain to make deliveries in labs, clean rooms, hospitals, offices and on the shop floor. Operate from a third party application or our MobileEyes robot control GUI. Includes self-docking charge station.

Standard PatrolBot AGV: # PAT0001

Level 1 Clean-Room Compliant PatrolBot AGV: # PAT0006



PatrolBot AGV



MobileEyes Software

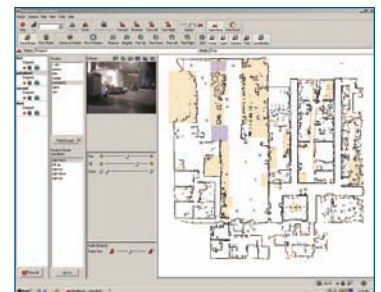
Surveillance and Hazard-Sensing PatrolBot with ARCSinside

Surveillance PatrolBot can head out on patrol regularly, or on demand from a central security system at the first alarm for verification and safe response. PatrolBot knows where it is and where it's going and can transmit location-aware audio and video as it travels, or for storage and later review. Add sensors as needed to provide the safety and security sensors for each customer. Readings and alerts can appear in your control window or our MobileEyes multi-robot control GUI. Includes self-docking charge station.

Surveillance PatrolBot: # PAT0003



Surveillance PatrolBot



MobileEyes Software

MapperBot with ARCSinside

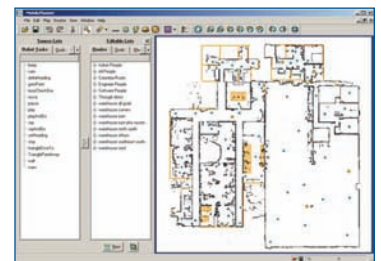
Scan building interiors at 1,000 sq. ft. per minute to make "instant" floor plans with MapperBot. Scan height is 12 inches (36 cm). Resulting file can be output as a raster .jpg, scaled for use in CAD software. Great for planning and documenting facility maintenance, security, and other modifications. In addition, each building scanned is now robot-ready. Just load its map into MobileEyes, set a robot with ARCSinside at a known position and click in the floor plan. The robot will travel automatically to deliver emergency supplies, investigate hazards or perform ordinary patrols.

MapperBot: # MPR0001

Optional PTZ Vision System for creating virtual tours:
ACD041



MapperBot



MobilePlanner Software

MobileRobots Bases & Accessories

ROBOT BASES

*P3AT
The All-Terrain Robot
P3T0001*



*PowerBot
The High-Payload Robot
POW0002*



*PeopleBot Guide
The Human Interaction Robot
PEOL004*



*P3DX
The Versatile Robot
P3D0001*

*AmigoBot
The Team Robot
AMI0013*



*Seekur
The Indoor-Outdoor, All-Weather Robot
SKR0001*



*PatrolBot
The Application Robot
PAT0003*



For cross-platform specification see
www.MobileRobots.com/specs

for Researchers & Universities

ROBOT ACCESSORIES

RANGE FINDING

3D Sweeping Laser

Detects difficult negative obstacles as well as enabling 3-D mapping and positive obstacle avoidance. Avoidance is integrated with our ARIA API and ARNL laser-navigation software.



3D Sweeping Laser
ACA0101

Color Digital Stereovision

For researchers in perception, we offer a stereovision package, including basic stereovision software.



Color Digital Stereovision
ACA0095

2D Laser Mapping & Navigation (ARNL)

Our complete software and hardware solution lets MobileRobots' bases map and navigate autonomously integrated with our ARIA API and MobileEyes GUI for easy programming and application.



2D Laser Mapping
ACA0023

Ultrasonic Transducers (Sonar)

Front or front-and-back sonar rings are available for most of our robots, integrated with our ARIA API for easy programming.

OTHER SENSING

Differential Global Positioning System (DGPS)

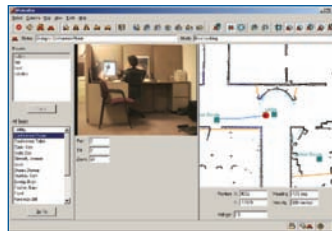
DGPS systems are available with satellite-based positional accuracy of 20m or 2cm.

Position Sensor

Position sensors combine compass with tilt/yaw information, and also include a temperature sensor.

Bumpers

Pressure sensitive bumpers are available or standard on most platforms and integrated in the ARIA API. These protective "sensors of last resort" are especially important on large robotic bases.



2D Laser Mapping &
Navigation
SOF0015



DGPS
ACT0080

See the latest additions and more details at
www.MobileRobots.com

MobileRobots Bases & Accessories

ROBOT ACCESSORIES



PTZ Vision System
ACTD041



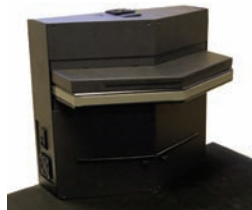
Gripper
ACT0036



P3 Arm
ACT0010



PowerBot Arm
ACT0011



Auto Dock-Charge Systems
ACA0014



Portable PowerCube
ACA0090

PTZ Vision System

Our Pan-Tilt-Zoom (PTZ) Vision System option provides images for surveillance, color-tracking and more sophisticated perceptual tasks, with camera controls integrated into our ARIA API and MobileEyes GUI software.

COMMUNICATIONS

Wireless

All MobileRobots bases are wireless Ethernet-ready. We offer 802.11b or g robot-side Ethernet radios as well as wireless access points for wired hubs.

Audio & Speech

Most MobileRobots bases offer audio and speech.

MANIPULATORS

We offer a wide range of manipulation accessories, from industrial 6dof PowerBot Arms to 5dof educational arms to 2dof grippers.

ONBOARD PCS

Embedded PCs

For autonomy and onboard sensory processing necessary for vision, laser, gps, inertial and other real-time analysis, new faster embedded PC's are available.

Multiple PCs

Multiple PCs with shock-mounted hard drive are now available for developers with non-system, processor-intensive operations.

CHARGING

Re-charging is a critical and often underestimated component of the robotic system. MobileRobots supplies chargers, portable charge cubes and automatic dock/recharge systems for 24X7 operation. Dock/charge systems are integrated in our ARIA API and MobileEyes GUI.

*See the latest additions and more details at
www.MobileRobots.com*

for Researchers & Universities

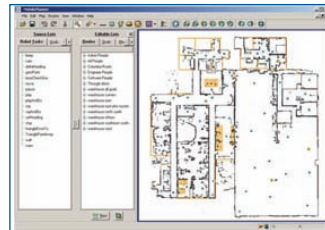
MOBILEROBOTS SOFTWARE

ARCSinside Software for Commercial & Industrial End Users

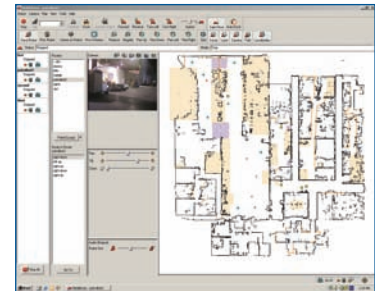
The ARCSinside Software Site License gives users access to MobileEyes control GUI and MobilePlanner map editing and tasking software from PCs throughout the site. Privileges may be managed to define levels of control. The optional Multi-Robot Central Server controls priorities in high-traffic robot installations and dramatically lessens bandwidth requirements from multi-robot surveillance systems.

ARCSinside Software Site License: # SOF0120

ARCSinside Multi-Robot Central Server: # ACT0200



MobilePlanner Software



MobileEyes Software

ARCSinside Software for OEMs, Integrators & Developers

SetNetGo License: Onboard software for network and robot set-up for installation.

Included on every ARCSinside robot and control system.

ARCSinside Developer Modules

SYSTEM INTEGRATION MODULE: Access to Advanced Robotics Control Language (ARCL) text socket robot control, plus pre-configured robot server for simulating robot movements for large-scale and integrated projects. # SOF0100

ONBOARD INTEGRATION MODULE: Utilities for running external software onboard the robot (inquire for CPU constraints). # SOF0101

INTERFACE DEVELOPMENT MODULE: Tools for using sensor and status information from the robot for external applications, plus infrastructure for the onboard integration module. # SOF0102



SetNetGo Software



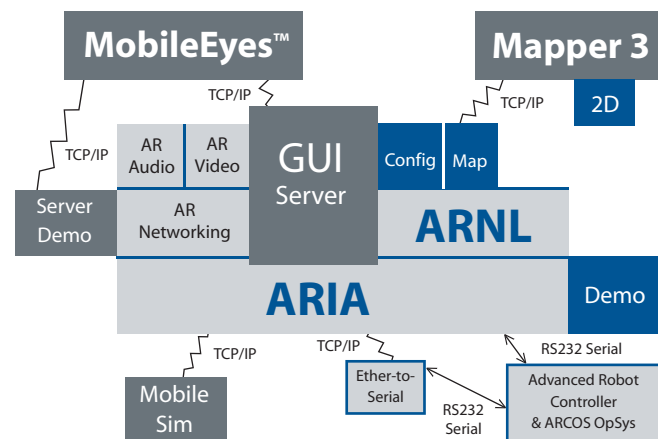
MobileSim Software

Software for Research & Universities

Every MobileRobots research robot includes an onboard firmware operating system. Also, robots include access to the ARIA API libraries, available in source code under the GNU Public License for use from programs in C++, Java, or Python. In addition, researchers receive demos, simulator and utilities to facilitate programming and network control. Purchasers of lasers and laser integration modules also receive Simultaneous Localization and Mapping (SLAM) plus laser-based navigation and localization software. Standard MobileRobots Research Software: included with every MobileRobots research base

Laser-Based Mapping and Navigation Software with Laser: # ACA0023

Laser-Based Mapping and Navigation Software, Integration Module only: # ACA0026



MobileRobots Inc

MobileRobots Inc designs, integrates and manufactures intelligent mobile robots and their navigation, control, sensing and response systems. Founded in 1995, we are an enterprise with over 2,500 robots in the field worldwide. Customer satisfaction continues to be our company's priority.



Customers include...

Amgen	NASA
Hewlett-Packard	SAIC
Intel	Siemens
MIT	Sprint
Honda	US Navy
Carnegie Mellon	Fujitsu
Microsoft	John Deere

Funding organizations and technology partners include...

DARPA
Foster-Miller
National Institutes of Health
RMT Robotics
SICK Optic
SRI's Artificial Intelligence Center
LG Electronics
Penobscot Bay Media
Cypress Computer Systems

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