Unified Asset Visibility Solutions for Healthcare
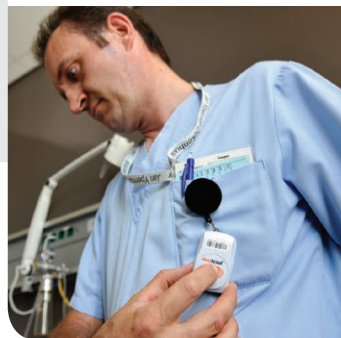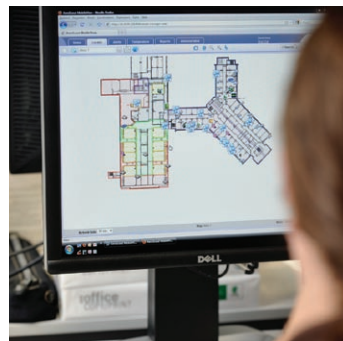
Real-time location, status and condition of assets, patients and staff throughout your hospital

> **Leverage standard Wi-Fi networks for:**
> - Asset Management
> - Equipment Maintenance
> - Temperature & Humidity Monitoring
> - Patient & Staff Safety
> - Patient Flow

Overview

Healthcare organizations face a variety of challenges, including increasing financial pressure, regulatory mandates, an ongoing need for improved use of staff time, and patient and staff safety concerns. Many of the problems which contribute to these challenges share a common cause – a lack of "visibility" into the real-time location, status and condition of patients, staff, medical equipment and other mobile assets. An infusion pump that isn't maintained on time, an open refrigerator with temperature-sensitive goods, suboptimal patient flow within and between departments, or a wandering patient can all have a major impact on a hospital's overall quality of care. AeroScout brings much-needed solutions to these challenges, increasing visibility within hospitals and delivering the tools to drive operational efficiency.

The AeroScout Unified Asset Visibility Suite for Healthcare

AeroScout solutions provide visibility into the location, status and condition of assets, patients and staff throughout all departments in the hospital. AeroScout is the chosen solution for many leading hospitals around the world and provides the only Wi-Fi location solution endorsed by the American Hospital Association (AHA).

AeroScout's healthcare solutions include real-time Asset Management, Equipment Maintenance, Temperature & Humidity Monitoring, Patient Flow and Patient & Staff Safety. These modular and scalable applications all employ AeroScout's industry leading technology that leverages clients' existing Wi-Fi infrastructure and integrates with most healthcare IT software systems.

AeroScout solutions serve the needs of clinical staff, IT management, materials management, clinical and biomedical engineers, laboratory and pharmacy personnel and others. These solutions ensure regulatory compliance, improve safety, reduce capital and operational expenditures, increase staff efficiency, increase revenue and enhance patient care.

Why AeroScout?

- Industry-leading provider of healthcare visibility solutions
- Leverages existing Wi-Fi network with unparalleled scalability and lowest network impact
- Hospital-wide solution that fits all healthcare visibility applications
- Web-based MobileView software enables alerting, reporting and viewing location, status and condition data on a variety of devices
- Room / bay level resolution and immediate choke-point detection
- Open interface for integration and a variety of integrated hospital information systems
- Complete healthcare solutions and applications
- Exclusively endorsed by the American Hospital Association

Track — Current and historical location, status and condition of assets, patients and staff

Alert — Automatically and immediately regarding context-based events that require attention

Manage — Valuable assets and people through a single Web-based user interface with reporting tools and dashboards

Integrate — Location and status information into existing hospital systems (e.g., OR information systems, maintenance and materials management, etc.)

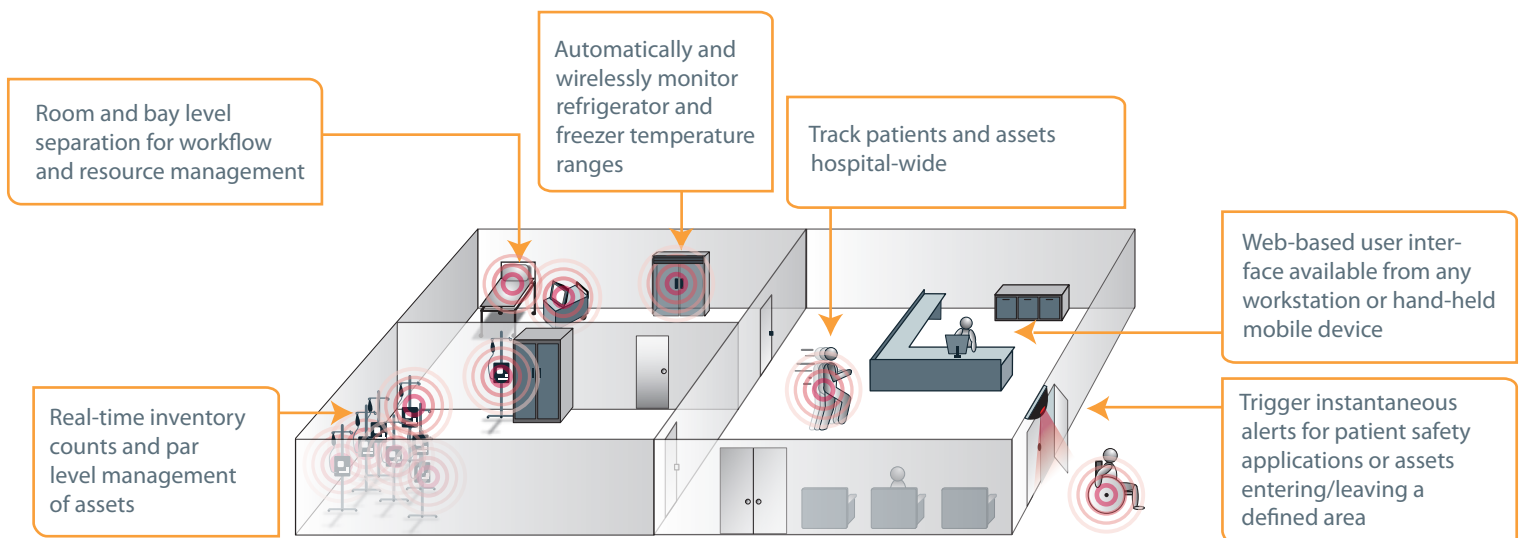# The AeroScout Healthcare Visibility Suite Includes

Asset Management – Real-time equipment tracking solution features automated inventory management, par level management, order fulfillment and rental management capabilities. It leverages the existing Wi-Fi network for hospital-wide visibility of equipment (e.g. infusion pumps, wheelchairs, defibrillators) location, condition and status. Hospital map views of specific assets or groups of assets are accessed from a Web-based application and from handheld devices. Real-time equipment location integration to inventory and materials management systems is provided, as are sophisticated reporting tools for analysis of utilization rates, inventory, distribution and par levels.

Equipment Maintenance – Automates the current manual processes that hospitals have for locating equipment requiring preventive maintenance, repair or recall. Hospital map views of specific assets or groups of assets requiring maintenance or recall are accessed from a Web-based application and handheld devices. Integration of real-time equipment location and map views with maintenance management systems is provided, as are sophisticated reporting tools which improve the workflow of daily maintenance processes.

Temperature & Humidity Monitoring - Safe temperature ranges for organs, vaccines, blood bags, food and pharmaceuticals are ensured through an automated Wi-Fi monitoring and alerting system. AeroScout's Wi-Fi temperature tags are simply placed in hospital refrigerators or freezers. In addition, humidity ranges in patient or operating rooms are monitored by AeroScout's Wi-Fi humidity tags. The solution leverages the hospital's existing Wi-Fi network, it requires no dedicated sensor network, no hard wires and is easy to install. AeroScout's MobileView software provides automated temperature and humidity monitoring and alerting, as well as all required logging and reporting data for regulatory compliance.

Patient & Staff Safety – Includes a set of applications for Patient Elopement, Staff Duress and Patient Distress. Some patients (e.g. trauma, Alzheimer's and dementia patients) may pose a risk to themselves or to staff. The solution enables tracking patients throughout the hospital and immediately indicates when a patient exits the ward/building or enters a restricted area. Patients can be equipped with wireless call button tags to alert staff of an emergency. Staff can carry call-button tags, which they can press to alert other staff members upon encountering an emergency or in staff duress situations. Additionally, AeroScout enables integration of RTLS to Nurse Call systems to detect staff presence in patient rooms and automate processes.

Patient Flow – In the OR, ED, clinics and other departments, knowing the location and status of clinical staff, patients, beds and critical clinical equipment is essential to improving patient care and departmental workflow. Staff can use the location and status to ensure procedures begin on time and decrease patient wait times. The real-time visibility of patients within and between departments and the availability of rooms and beds are easily determined through tracking boards. The location and status data can be integrated into existing software systems to help optimize workflows and increase throughput.

Room and bay level separation for workflow and resource management

Automatically and wirelessly monitor refrigerator and freezer temperature ranges

Track patients and assets hospital-wide

Web-based user interface available from any workstation or hand-held mobile device

Real-time inventory counts and par level management of assets

Trigger instantaneous alerts for patient safety applications or assets entering/leaving a defined area

Solution Components

Tags and Wi-Fi Devices

AeroScout's industry-leading Wi-Fi tags are small, rugged wireless devices that can be attached to assets or people to track their location. Each tag sends a small, unique, wireless signal, allowing the AeroScout software to recognize the specific tag and its movements. The tags have a battery life of up to four years and include advanced features such as a call button, temperature and humidity sensing capabilities, tamper sensing and motion detection. Assets can be tracked either indoors or outdoors, and any Wi-Fi enabled device can be tracked without requiring any software client installation.
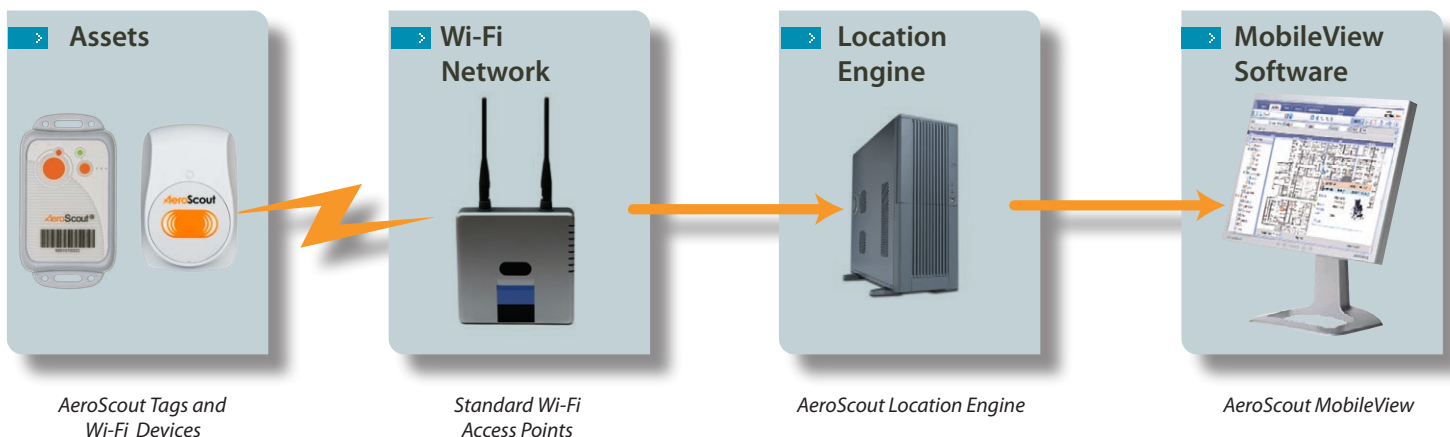
Infrastructure

Standard Wi-Fi access points act as "readers," receiving all AeroScout tag transmissions and forwarding them to a location engine which determines accurate location. This allows hospitals to use their existing Wi-Fi network for their real-time visibility solutions.

AeroScout Exciters are unique choke-point detection devices, which cause tags within a close range to send an instantaneous alert. This ensures that hospitals can determine when an asset, staff member or patient goes through a doorway, enters / exits a room or facility, or enters a restricted area.

MobileView Software

MobileView is AeroScout's Web-based enterprise-wide software solution for viewing location, status and condition information from any source (Wi-Fi RFID, Passive RFID, sensors, etc.). The system includes searching capabilities, rules-based alerts, and advanced reporting. MobileView location and status information can be integrated into other hospital management systems and can also be viewed on mobile devices.

Assets	Wi-Fi Network	Location Engine	MobileView Software
AeroScout Tags and Wi-Fi Devices	Standard Wi-Fi Access Points	AeroScout Location Engine	AeroScout MobileView

Did you know:

The average hospital loses as much as 15% of its critical assets every year[1]

51% of nurses report that they spend at least 30 minutes per shift searching for equipment[2]

You Can See Clearly Now

AeroScout's visibility solutions are proven to deliver ROI to hospitals in less than one year by applying the power of location, status and condition information to improve operations throughout the hospital and across multiple functional areas. The total cost of ownership (TCO) of the solution is reduced by leveraging existing wireless infrastructure. Benefits of the AeroScout Healthcare Visibility Suite include:

Asset Management
- Improved asset utilization and purchase management resulting in reduced capital expenditures and rental costs
- Increased staff efficiency by automating equipment searches
- Theft and loss reduction through real-time tracking and alerting
- Improved quality of care and increased patient throughput due to improved equipment availability

Equipment Maintenance
- Improved regulatory compliance through higher levels of on-time completion of equipment preventive maintenance
- Increased clinical engineering efficiency and productivity
- Improved patient safety and overall quality of care through successful recall management and timely equipment maintenance

Temperature Monitoring
- Improved regulatory compliance with temperature data collection requirements
- Increased staff efficiency by freeing up caregivers' time
- Improved quality of care through constant monitoring of safe temperature ranges and analysis of logged data to identify trends
- Spoilage reduction - reduce typical time it takes to identify and react to a temperature problem

Patient & Staff Safety
- Reduced amount of safety incidents
- Improved safety and peace of mind for clinical staff
- Improved quality of care

Patient Flow
- Increased revenue and throughput by implementing optimized and automated processes
- Increased staff efficiency and patient satisfaction through reduced wait times and improved ALOS

More than just where

Installing a complete AeroScout solution in a hospital means more than just finding things faster. It means automatically notifying staff before they run out of critical equipment. It means empowering materials managers to deliver equipment more efficiently and allowing laboratory staff to spend more time focusing on quality of care and less time checking refrigerator temperatures. It means alerting security as emergencies happen, in real-time. It means updating hospital information systems with accurate, valuable data about patient movement. Visibility is more than just "where" - it's the power to improve processes.

1. Source: ID TechEx (2007)
2. Source: Cisco – The High Cost of Nurses Communication Challenges (2009)

About AeroScout

AeroScout is the market leader in Unified Asset Visibility solutions. Customers improve operational efficiency using AeroScout products that leverage standard Wi-Fi networks to track and manage the location, condition and status of mobile assets and people. AeroScout's global customer base consists of leading hospital, manufacturing and logistics organizations, including many of the Fortune 500. The company originally invented the first Wi-Fi-based Active RFID tag, and today is widely recognized as leading the market in number of deployments and tags shipped. Headquartered in Redwood City, California, AeroScout has offices in Europe, the Middle East, Asia, Australia and Latin America. For more information, please visit www.aeroscout.com.

Locations

AeroScout (Headquarters)
1300 Island Drive
Suite 202
Redwood City, CA 94065
Tel: +1 (650) 596 2994
Fax: +1 (650) 596 2969
E-mail: info@aeroscout.com

Europe, Middle East, Africa Office
Tel: +32 2 709 2949
Fax: +32 2 791 9028
E-mail: emea@aeroscout.com

Latin America Office
Tel: +52 55 5001 5769
E-mail: latam@aeroscout.com

Japan Office
Tel: +81 3 3556 9003
Fax: +81 3 5875 3723
E-mail: apac@aeroscout.com

Asia-Pacific Sales
Tel: +1 (650) 596 2994
E-mail: apac@aeroscout.com

Australia and New Zealand Sales
Tel: +61 3 9013 4449
E-mail: anz@aeroscout.com