The Ekahau Real-Time Location System

(RFID-over-Wi-Fi™) Delivering Business Intelligence Through Location

Gain visibility into the location, condition, and status of assets, people, and workflows with the Ekahau Real-Time Location System (RTLS)—a patented solution with active RFID-over-Wi-Fi™ technology.

Ekahau RTLS software and tag hardware together create powerful business intelligence that improves decision-making by leveraging your existing wireless infrastructure.

www.ekahau.com
Ekahau delivers business intelligence through advanced location tracking that solely relies on existing enterprise Wi-Fi networks. The Ekahau solution provides visibility into workflow bottlenecks to enable process improvements that save time and money. As an alternative to high-priced consultants and wired solutions, Ekahau uses your existing Wi-Fi network to enable cost-effective, accurate RTLS throughout the facility—no readers, no cabling, and no hassles.

**How Ekahau RTLS Works**

Ekahau RTLS = Ekahau tags + your Wi-Fi + Ekahau software

With Ekahau RTLS, you’ll get business intelligence at your fingertips and chair-level accuracy that leverages your existing Wi-Fi infrastructure investment. Ekahau’s patented RFID-over-Wi-Fi solution offers a 100% wire-free deployment, with little to no installation downtime, at half the cost of RTLS alternatives. Ekahau RTLS does not require WLAN authentication nor impact WLAN performance.

Ekahau RTLS uses a standard VoIP or data-grade Wi-Fi network to deliver one meter chair-level location visibility using low-cost, wire-free infrared beacons. By using your existing Wi-Fi infrastructure, Ekahau makes facility-wide RTLS adoption affordable, enabling organizations to go beyond ‘tracking stuff’ to unlocking the true value of business intelligence through location.

Lightweight, battery-powered and re-chargeable Ekahau Wi-Fi tags are attached to assets or worn by people. The tags transmit 802.11b (Wi-Fi) radio frequency links periodically to Wi-Fi APs (Access Points - APs) and back to Ekahau Vision™ software, for location analysis and display. Ekahau’s patented algorithms interpret RF signal data, calculating a number of probable locations and assigning confidence levels to each probable location. The Ekahau algorithms filter out naturally occurring RF signal fluctuations and offer advanced 3D “floor accuracy”. That’s why Ekahau is certified by more Wi-Fi networks than any other RTLS system.

**BENEFITS**

- Remove workflow inefficiencies by locating assets faster
- Maximize equipment utilization by improving maintenance cycle times
- Automate manual and repetitive tasks to drive revenue
- Improve safety by assuring food and medication temperatures
- Minimize guest and patient wait times to improve satisfaction
- Improve safety by reducing emergency response times on campus
- Cost-effectively monitor patients who are ambulatory

**FEATURES**

- Find anyone and anything in real-time on web browser maps or lists
- Room and chair-level accuracy without wired readers
- Two-way messaging between staff using Ekahau badges
- Reduce installation time by 50% through eliminating dedicated cabling requirements
- Send and receive text and audio alerts triggered by location, condition, activity level, or status
- Customize reports on asset utilization, par level, dwell time, movement history, and more
- Simplify integration into your ecosystem with an open application programming interface (API)

**Location Awareness Featuring RFID-over-Wi-Fi™ Explained**

1. **Ekahau Tags**
   Attached to assets or worn by people, these devices utilize active RFID to transmit 802.11 ‘blinks’ containing location data to your Wi-Fi network.

2. **Your Wi-Fi Network**
   Wi-Fi-based tag data is sent to Ekahau Vision software in real-time.

3. **Ekahau Vision™**
   This sophisticated software displays tag locations on real-time maps, manages the system’s messaging and alerting functions, and reveals BI through analytics reporting.

www.ekahau.com
Ekahau Vision™
Measure. Monitor. Manage.

The Ekahau Vision location analytics platform, powered by Tableau, reveals game-changing business intelligence that impacts decision-making and workflows using accurate, real-time location data. Using actual floor plans, Ekahau Vision displays the building(s), floor(s), zone(s), room, and sub-room locations with the status and condition of assets and people as activity occurs in real-time. Ekahau Vision also handles tag management, provides an open API for integration with third-party systems, enables alerts, generates reports, offers dashboard views to help support improved decision-making.

Ekahau RTLS Solutions Benefits for Healthcare

**ASSET TRACKING AND MANAGEMENT**
Lower inventory expenses, shorten equipment search times, prevent theft, and automate maintenance with real-time visibility into the location and status of equipment (e.g. sterilized/unsterilized, broken/fixed, in use/available), using your Wi-Fi network.

**PATIENT SAFETY AND THROUGHPUT**
Reduce patient wait times between procedures with automated alerting and monitor patient activity/inactivity to improve safety (e.g. admissions/discharges) with real-time, location-based text communications.

**STAFF SAFETY AND WORKFLOW OPTIMIZATION**
Reduce security response times and the likelihood of injury in cases of staff duress with wearable Wi-Fi based badges that instantly alert security staff badges with a staff member’s exact location. Instant notifications automatically alert caregivers of patient activity/inactivity and automate routine workflows.

**ENVIRONMENTAL MONITORING AND SENSING**
Ensure that blood, tissue, medication, and food refrigeration units are kept at safe temperatures 24/7 with automated, real-time temperature monitoring, Joint Commission documentation and alerting.

Ekahau Vision™ Software Functionality

**TRACKING AND MAPPING**
Obtain location information about anyone and anything displayed on real-time maps or in list views.

**MONITORING**
Gain awareness and understanding regarding your asset inventories, equipment conditions (sterilized/unsterilized), and zone-based movements.

**SAFETY ALERTING**
Replaces paging systems with automatic texts triggered by location and status-based events with a patent-pending pull-down safety switch.

**REPORTING**
Easily create reports on a person’s or object’s movement history, activity/inactivity, location, wait time, asset utilization, par levels, dwell times, location histories, and more.

**TWO-WAY MESSAGING**
Enable communication between staff, security, and third-party systems using Ekahau Wi-Fi badges.

**EKAHAU MOBILE VISION™**
Use the iOS-based mobile application to conveniently view and respond to Ekahau Vision events and alarms.

www.ekahau.com
Ekahau Inc. is the high-performance leader in Real-Time Location Systems (RTLS) and utilizes active RFID-over-Wi-Fi™ technology. The solution features Ekahau Vision™ software and Wi-Fi-based tags that give staff and managers unprecedented visibility into the location, condition, and status of assets, people and workflows. Thousands of Fortune 500 companies, hospitals, and other facilities rely on Ekahau’s patented technology to reveal business intelligence that drives decision-making. Ekahau partners include leading wireless software developers, systems integrators, and WLAN providers. Learn more about Business Intelligence Through Location at: www.ekahau.com or on the Ekahau Blog, Facebook, Twitter and LinkedIn.

**Use Ekahau RTLS in:**

**EDUCATION**
With the Ekahau location-based alert system, security teams and police instantly see the location of teachers or campus professionals wearing Ekahau Wi-Fi badges along with other event information—without dependence on cellular networks, VOIP, or dialing.

**HEALTHCARE**
Having the Ekahau instant, location-based alert system not only offers peace of mind to busy caregivers, it also reduces emergency response times by keeping caregivers and patients visible.

**LAW ENFORCEMENT AND CORRECTIONS**
A simple, patent-pending pull-down safety switch on the Ekahau Wi-Fi pager badge alerts nearby officers while providing accurate location information and details on the nature of the incident in question (blue button/white button and call alarm button).

**INDUSTRIAL**
The Ekahau Wi-Fi pager badge and software solution also offers automated mustering, lone worker monitoring, head counting and motion sensing capabilities, routine check-in procedures and motion sensing capabilities, ideal for a variety of harsh indoor and outdoor environments including mines, factories, and oil and gas plants.

**GOVERNMENT AND MILITARY**
Ekahau RTLS provides enterprise-grade, proven and field-tested asset, staff, and guest visibility. Ekahau RTLS solutions are used by hundreds of government customers including the Navy, VA, and DoD.

**RETAIL**
Ekahau creates custom RFID and RTLS solutions for retail tracking as well as retail and inventory management, including: shopper tracking, activity monitoring, breadcrumb trails, and entry/exist security alerts. Ekahau RTLS can also support location-based couponing.

Every minute counts during an emergency—knowing the exact location of an individual can shorten response times. Ekahau Vision software together with Ekahau Wi-Fi badges help prevent injuries indoors and outdoors—wherever Wi-Fi works.

The Ekahau RTLS safety solution goes beyond conventional paging and alert systems that lack location visibility and require dialing or reliable cell phone coverage. End users can signal an emergency by simply pulling-down on the wearable, Ekahau Wi-Fi badge. Ekahau Vision receives the tag’s help request, then instantly alerts nearby security teams of the individual’s exact location. Ekahau Vision sends the alerts to badges that reveal a text message on its LED screen, to an email inbox, or to a computer screen through a pop-up message.