



Features and Benefits

Integrated location tracking software

- Most accurate of any WLAN system
- Enable new applications, such as asset tracking and inventory management
- Tighter WLAN security

Customizable Application Programming Interface (API)

Easy integration with external applications, such as e911, ERP, and workflow systems

Real-time RF management

Ensures location services have minimal impact on WLAN service delivery

Standalone location server

Scalable to thousands of clients

A Complete Solution for Wireless Tracking

Airespace offers a complete Wireless Location Services package that leverages its award-winning Wireless LAN (WLAN) infrastructure to enable IT staff to track the exact location of mobile devices. Airespace Wireless Location Services (AWLS) enables powerful location-based applications, such as Emergency 911 (e911) services, intrusion protection, and asset management. In addition, the AWLS package enhances WLAN security by allowing IT managers to take physical location into account when giving access control. Through a robust Application Programming Interface (API), AWLS can be easily integrated into enterprise security systems, resource planning tools, and other applications that can leverage specific location information. This makes AWLS an intrinsic part of any end-to-end enterprise management scheme.

The key elements of the AWLS solution include:

- **High-resolution location software** that is integrated into the company's award-winning Enterprise WLAN platform. Airespace's location software can track individual clients to within several meters.
- **A location server appliance** that allows AWLS to track thousands of wireless devices simultaneously.
- **An Application Programming Interface** that integrates AWLS with key external systems, including Enterprise Resource Planning (ERP) tools, scheduling and workflow software, and e911 systems.
- An active **802.11 RFID transceiver** with a battery that lasts up to three years. This small "RFID tag" is easily attached to devices and people for seamless tracking capabilities. Active beacons ensure anytime/anywhere tracking of devices throughout an Airespace wireless network.

Better Asset Tracking; Tighter Security for Your Building and Network

AWLS enables network managers to locate people and assets anywhere in an enterprise environment. The Airespace system can be used to track people, such as children in an amusement park, security personnel in an enterprise, and patients in a hospital. Or, AWLS can be used to locate and track valuable equipment, such as laptops, overhead projectors, storage containers, vehicles, shopping carts, medical equipment, and manufacturing equipment. Automatic alarms can help IT staff avoid the removal of mobile devices from authorized premises.

The AWLS package also allows IT staff to establish location-based access control policies, whereby the physical security in a building can be used as a means of controlling WLAN access. In this respect, WLAN security is taken to a whole new level with Airespace's Wireless Location Services.

Advanced RF Fingerprinting for High Accuracy

Airespace uses advanced RF fingerprinting technology to provide detailed location information to within a few meters. Airespace's high-accuracy location solution is fueled by detailed RF prediction tools that create a comprehensive map of a building's RF topology. This information is then stored in a database and compared to real-world RF signal strength measurements gathered by Airespace Access Points to determine the precise location of 802.11 devices. By reconciling live information with known building characteristics, the Airespace solution takes into account unique RF characteristics, such as reflection, attenuation, and multi-path propagation. This enables the Airespace solution to provide much more accurate location information than alternative WLAN solutions that use simple triangulation or nearest AP algorithms.

Airespace Wireless Location Services (AWLS)

Active RFID Tags for Flexible Device Tracking

AWLS enables enterprises to easily track any mobile device – from laptops with Wi-Fi cards to anything with an Airespace RFID tag. The Airespace RFID tag generates active beacons that are picked up by Airespace Access Points. These beacons ensure that tagged devices can be located anytime, anywhere throughout an enterprise environment. Specific features of the Airespace RFID tag that make it ideal for enterprise deployments include:

- **Highly Programmable** – IT staff can program the asset tag beaconing frequency, which will determine the time/location accuracy provided by AWLS. In addition, an asset tag can be associated with a device name. For instance, an asset tag attached to an overhead projector would appear as “Overhead Projector”.
- **Extended Battery Life** – The Airespace RFID tag contains a powerful, replaceable battery that provides up to three years of battery life. The Airespace RFID tag notifies WLAN management software when its battery is low, enabling efficient replacement and minimizing down time. The Airespace RFID tag can also be easily activated or deactivated for conserving battery power while inactive.
- **Flexible Mounting** - The Airespace RFID tag is enclosed in a compact custom case and offers a variety of mounting options. By attaching a strap, the tag can be placed on a person’s wrist. Alternatively, a mounting plate is available for attaching the tag with a pin or clip. The tag can also be mounted directly on assets using adhesive tape or Velcro. The tag’s small size and weight allow mounting even on very small assets.
- **Rugged Performance** – Airespace RFID tags are designed to operate in challenging work environments, including manufacturing and outdoor areas. The tag enclosure is water-resistant and designed to withstand significant physical shocks and drops.

Intelligent RF Management

Airespace uses real-time RF management to ensure that device tracking services do not adversely impact overall WLAN performance. Airespace’s unique AireWave Director™ Software is critical to this role, providing patent-pending radio resource algorithms that manage WLAN bandwidth for ideal operations.

Airespace RFID tags also are equipped with channel sensing techniques that help avoid interference with Wi-Fi networks. In addition, low power emissions from these devices make the Airespace system safe for use with sensitive equipment, such as medical devices in a hospital.

Airespace Wireless Location Services (AWLS)

Specifications

Performance

- Typical outdoor range: 200m (600 feet)
- Typical indoor range: 60m (180 feet)

Physical and Mechanical

- Standard dimensions: 62mm x 40mm x 17mm
- Weight: 35g (1.2 oz.)
- Mounting options include wrist strap, safety pin, clip, adhesive tape or Velcro

Radio

- Transmission power: up to +20 dBm, 100 mW
- Channel sensing avoids interference with wireless networks

Programmability

- Transmission interval programmable between 1 second and 3.5 hours
- Channel and power level programmable
- Wireless tag programming or alternative cabled serial interface

Environmental Specifications

- Temperature: -20°C to +65°C (-4°F to 149°F)
- Humidity: 0 to 95% non-condensing
- Housing is water and dust resistant and includes a rubber lining

Electrical

- 3.6V Lithium AA battery (replaceable)
- Typical battery life: up to 3 years (dependent on transmission rate)

Compliance

- Fully compliant with Wi-Fi (IEEE 802.11b/g) wireless networks

Certification

- Radio: FCC Part 15, sub-part C class B, sub-part B EN 300-328, EN 300-330, EN 301-489
- Safety: CE, cTUVus (EN60950)

Accessories

- Tag Hanger (for mounting on vehicle rear-view mirror)
- T2 Tag Programming Cable

Warranty

- Ninety (90) day limited warranty (not including battery)



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