Bluesoft Inc.

Platforms for Wireless Positioning Applications

DATA SHEET

AeroScout™ Location Receiver

AeroScout™ Location Receivers provide robust measurement capabilities packaged in small, easy-to-install devices

AeroScout™ System Overview

The AeroScout Location Receiver is a component of the AeroScout wireless LAN location platform, which adds accurate location capability to Wi-Fi™ wireless networks. The AeroScout architecture stands out in several ways:

- **No modifications to mobile unit hardware or software.** AeroScout works with standard laptops, PDAs, barcode scanners and other Wi-Fi wireless devices. This eliminates a major management challenge and enables simple implementation in public environments.
- **No dedicated backbone network.** All communications between Location Receivers and the AeroScout Location Server use standard Ethernet connections and AeroScout achieves accurate measurement synchronization without the use of a dedicated network.
- **Locates equipment that is not Wi-Fi enabled.** Small, battery-powered AeroScout Tags can be attached to a variety of equipment, such as medical devices, containers and shopping carts.
- **Open development platform.** The AeroScout System includes a set of tools for designing, testing and implementing enterprise-class location-based applications.

Key benefits

Ease of installation: Location Receivers communicate with the AeroScout Location Server via standard Ethernet or wirelessly over a Wi-Fi network – no dedicated location network cabling is required. Location Receivers also support Power over Ethernet, eliminating costly electrical installation. Configuration is simple, as well: The installer executes all setup tasks from the Location Server's System Manager software, which records the placement of a Location Receiver with a single mouse click.

Performance: Bluesoft's expertise in wireless signal measurement has led to the development of a range of patent-pending algorithms and techniques. Embedded in the Location Receiver, these measure the time of arrival (TOA) of standard 802.11b messages to the nanosecond. The Location Server processes this TOA data to produce accurate and reliable location data suitable for mission-critical applications. Each Location Receiver can process over ten location measurements per second, enough to satisfy even the most demanding applications. Coverage by a minimum of three Location Receivers suffices to enable location processing, and the coverage area of each receiver is much larger than that of standard access points.

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Key benefits (cont.)

Compliance: The product is fully compliant with Wi-Fi and IEEE 802.11b/g standards. The units do not interfere with the wireless local area network. Even when set up with a bridge to provide location-measurement data wirelessly, the volume of traffic Location Receivers generate is insignificant.

Security: Location Receivers do not accept any Wi-Fi client associations, so they need not be placed on secure Ethernet ports and pose no security risks. In addition, together with appropriate security software, Location Receivers may be used as wireless intrusion-detection devices to detect and locate unauthorized use of access points and/or client devices.

AeroScout™ Location Receiver Specifications

LOCATION
Typical outdoor range: 200m
Typical indoor range: 60m
Over 10 measurements processed per second
Patent-pending signal-processing algorithms
Supports standard Wi-Fi (802.11b/g) clients and AeroScout Tags

PHYSICAL AND MECHANICAL
Dimensions: 140mm x 110mm x 35mm

RADIO
2.4GHz direct sequence spread spectrum radio
Supports all worldwide Wi-Fi channels (1-14)
Detachable omni-directional diversity antenna set

INTERFACES
Ethernet: 10/100 base-T Ethernet (RJ-45)
External antenna: SMA connector to enable customized area coverage and system topology
Compatible with standard wireless bridges to enable wireless backhaul

MANAGEMENT
Static IP support
All settings configured remotely using AeroScout System Manager

ENVIRONMENTAL SPECIFICATIONS
Temperature: -20°C to +50°C (-4°F to 122°F)
Humidity: 0 to 95%, non-condensing
Optional NEMA housing available for outdoor and rugged environments

POWER SUPPLY
Wall unit: autosensing 100/240 VAC
Power-over-Ethernet: 802.3af compliant

COMPLIANCE
Wi-Fi (IEEE 802.11b)
IEEE 802.3u

CERTIFICATION
UL60950/CE
Radio: FCC Part 15 B&C, ETSI ETS 300 328 & ETS 300 826, CISPR 22, Class B

WARRANTY
One year limited warranty

Ordering Information

For ordering and pricing information contact Bluesoft at info@bluesoft-inc.com and refer to the AeroScout Location Receiver (BWH1000).

Technical Support

Contact Bluesoft for support at support@bluesoft-inc.com or at +972 (8) 9363136, extension 116. Additional technical support can be acquired by purchasing one of our fee-based support options.

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