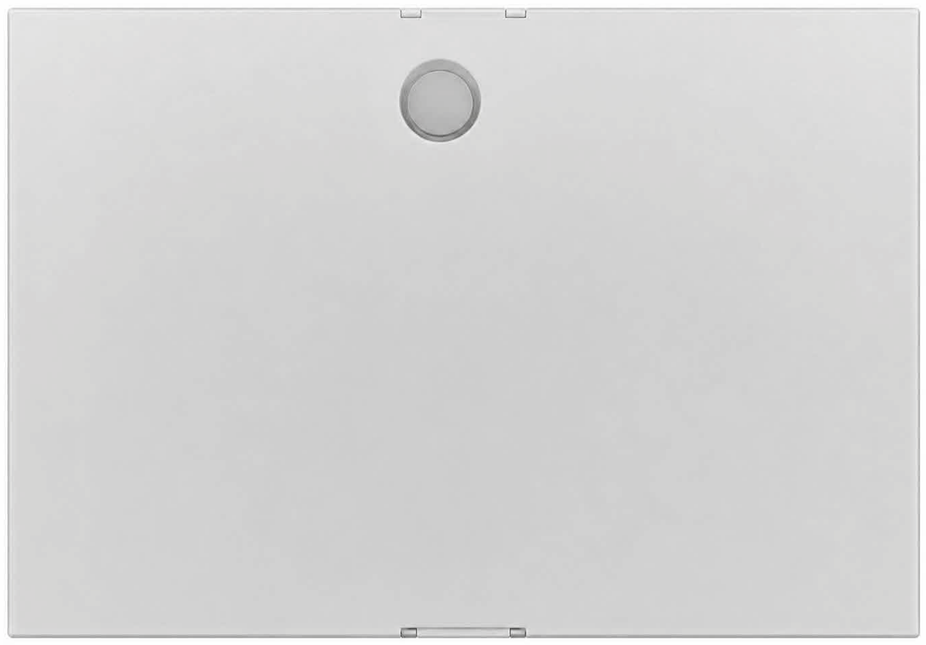
Product Specification Sheet
Wireless RFID Hallway Elopement Locator
WNC-125ELHB



WNC-125ELHB

The WNC-125ELHB Wireless RFID Hallway Elopement Locator is an advanced, commercial-grade tracking and wandering prevention portal designed for memory care facilities, assisted living communities, psychiatric wards, and pediatric units. Operating as a critical component of a comprehensive wander management system, this device creates an invisible, localized Radio Frequency Identification (RFID) detection zone across hallway corridors, exit points, and restricted thresholds.

When a resident or patient wearing a calibrated RFID active wristband or pendant enters the tracking field, the WNC-125ELHB instantly detects the tag's unique signature. It immediately transmits an automated emergency signal over a secure 900 MHz wireless mesh network to the central master console, while simultaneously triggering localized alerts like door locks or hallway visual displays to prevent unauthorized egress (elopement).

Architects and Engineers Specifications

The Patient Wandering and Elopement Prevention Portal shall be the Wireless RFID Hallway Elopement Locator, model SKU: WNC-125ELHB. The unit shall combine a low-frequency 125 kHz RFID proximity scanning array with a high-power 900 MHz frequency-hopping spread spectrum (FHSS) wireless transmitter to detect and report wandering events independent of the facility's localized Wi-Fi or LAN networks.

The locator must generate an adjustable radial tracking field variable from a minimum of 2 feet to a maximum of 15 feet (0.6 m – 4.5 m) to encompass standard and wide double-door hallway corridors. Upon scanning a compatible active RFID tag worn by a monitored patient, the portal must immediately decode the unique multi-digit patient identifier and transmit a priority elopement alarm packet containing location and patient identity metadata to the central nurse call computer console.

Hardware features must include a minimum of two on-board Form C dry-contact relays to enable direct automated control of magnetic locks or peripheral strobe lights. The system logic must incorporate a dedicated override input terminal for integration into the facility's main fire alarm control panel (FACP) to fail-safe release all locked doors automatically upon fire alarm activation. The device enclosure shall be a low-profile surface or ceiling mount assembly built of flame-retardant, high-impact polymers and feature exterior diagnostic LEDs to visually verify active power, wireless connection integrity, and active RFID field generation.

Product Specifications

- **RFID Scanning Frequency:** 125 kHz (Low Frequency)
- **Data Transmission Network:** 900 MHz Spread Spectrum (Frequency Hopping)
- **Detection Field Range:** Adjustable from 2 to 15 feet (0.6m to 4.5m) radial field
- **Relay Outputs:** 2 Form C Dry-Contact Relays (Rated 2A at 30V DC)
- **Auxiliary Input Interfaces:** Keypad/Card Reader Bypass Input, Fire Alarm Tie-In Input
- **Primary Power Supply:** 12V DC to 24V DC input (via localized AC adapter)
- **Secondary Backup Power:** Internal trickle-charged rechargeable battery pack option
- **Mounting Configuration:** Wall-mount surface box or flush-mount ceiling ceiling installation
- **Dimensions (approx.):** 8.5" x 11.0" x 2.2" (21.6 cm × 27.9 cm × 5.6 cm)

Equipment Options

The WNC-125ELHB functions as a specialized network portal that coordinates with multiple wireless tracking and signaling assets:

- **Patient & Staff Transmitters:** Natively tracks WNC-TAG-LF Active RFID Patient Wristbands, specialized wandering ankle tags, and staff escort badges.
- **System Integration Backbones:** Fully compatible with the WNC-SERVER-UL1069 PC Computer Console, Wireless MV200 Plus Desk Consoles, and WNC-RP-UL1069 Network Repeaters for system-wide alert routing.
- **Auxiliary Warning Interfaces:** Seamlessly triggers Multi-Colored Corridor Dome Lights, localized audio buzzers, electronic door strikes, and alphanumeric wireless reader boards.
- **Enclosure Enhancements:** Available with an optional flush-mount ceiling kit, a heavy-duty vandal-resistant polycarbonate protective shield, or an outdoor-rated weatherproof environmental housing.

BEC Integrated Solutions
Toll-Free: 888.556.3998
Phone: 716.689.0871
Fax: 716.312.6021
Address: 5225 Sheridan Drive, Georgetown Square
Williamsville New York 14221.
E-mail: support@becsolutionsllc.com

Standard Features

- **Dual-Frequency Architecture:** Utilizes a localized low-frequency 125 kHz RFID scanning field for high-precision proximity detection, coupled with a high-power 900 MHz spread spectrum transmitter to relay alerts across long distances to the main nurse call server.
- **Adjustable Proximity Zone:** Features a digitally configurable detection radius ranging from 2 feet up to 15 feet (0.6m to 4.5m), allowing facilities to customize the portal width to match specific hallway dimensions and prevent false alarms from nearby pedestrian traffic.
- **Real-Time Patient Identification:** Decodes and transmits the specific patient ID, location text, and timestamp metadata directly to the central master monitoring station for targeted emergency response.
- **Supervised System Health:** Fully supervised by the central system; transmits automated periodic check-in signals to verify operational status, antenna tuning, and power line stability.
- **On-Board Relay Control:** Equipped with dual programmable dry-contact relays capable of interfacing directly with magnetic door locks (maglocks), automatic door operators, or localized security sirens.
- **Visual Field Status:** Integrated exterior-facing LED diagnostic array providing staff with instant visual verification of power status, RFID field activity, and wireless network link health.

Compliance and Certification

- **FCC Status:** Certified under FCC Part 15 regulations for both intentional 900 MHz radiators and 125 kHz low-frequency transmitter systems, ensuring clean co-existence alongside adjacent life-safety, cellular, or Wi-Fi arrays.
- **UL Standards:** Components comply with industrial signaling and access control safety standards, featuring a dedicated fire alarm panel override loop that instantly cuts power to door maglocks during a structural fire event.
- **RoHS Status:** 100% compliant with global Restriction of Hazardous Substances (RoHS) environmental criteria, utilizing exclusively lead-free solder and non-toxic polymer compositions.

More Features

- **Anti-Passback & Tailgating Logic:** Incorporates intelligent directional sensing algorithms to distinguish between a wandering patient approaching an exit versus an authorized staff member escorting a resident.
- **Non-Volatile System Memory:** Retains all field range configuration metrics, zone profiles, and paired master network IDs through total power outages, eliminating the need for field calibration upon system reboot.
- **Bypass & Escort Functions:** Supports hardwired integration with keypads, proximity card readers, or biometric scanners to allow authorized staff to bypass the elopement zone without triggering a system-wide lock down or alarm.

BEC Integrated Solutions

Toll-Free: 888.556.3998
Phone: 716.689.0871
Fax: 716.312.6021

Address: 5225 Sheridan Drive, Georgetown Square
Williamsville New York 14221.
E-mail: support@becsolutionsllc.com