Accutech 700400 LC 1400 Wireless Transmitter

LC 1400 Wireless Transmitter | Centralized Wander Management Infrastructure Hub

PRODUCT OVERVIEW

The Accutech 700400 LC 1400 Wireless Transmitter serves as a core hardware intelligence component within advanced wandering management and resident safety infrastructures. It is engineered to bridge the gap between physical perimeter sensors deployed at facility exits and localized control monitoring stations. By aggregating and processing signals from individual resident wearables and entry points, it eliminates the operational complexity of managing individual entry points. This centralized topology ensures that large-scale senior care, nursing home, memory care, and hospital facilities maintain instantaneous, real-time situational awareness.

Deployed directly on at-risk individuals within memory care environments, specialized nursing wings, and clinical safety zones, the 700400 module channels wireless tracking telemetry. This proactive routing method eliminates communication bottlenecks and guarantees that complex localized actions—such as authorized staff bypass, secure visitor access, and localized security overrides—are instantly synchronized with perimeter sensors. This active tracking processing ensures absolute protection across expansive hospital wings, long care facility corridors, and high-risk infant protection zones by safeguarding exposed external egress routes from environmental wear and unauthorized passage.

ARCHITECTS AND ENGINEERS (A&E) SPECIFICATION

- **System Infrastructure:** The contractor shall supply, install, and configure the Accutech 700400 LC 1400 Wireless Transmitter to act as the primary external security access control and localized override node. The hardware must support direct integration configurations to synchronize active bypass states directly with peripheral zone controllers.
- **Wearable Protection:** The remote transmitter assembly shall incorporate a durable, commercial-grade structural design explicitly engineered to sustain continuous clinical exposure, operating reliably across extreme temperature variations, direct moisture impacts, and high-humidity environmental conditions.
- **Access and Control:** The device attachment interface shall feature a lightweight, wearable configuration to allow authorized clinical staff, security personnel, and facility supervisors to execute localized door bypass commands and alarm resets directly at the security boundary.

- **Enclosure and Durability:** The electronics assembly shall be protected inside a ruggedized, vandal-resistant commercial-grade housing optimized for flush-mount or surface-mount terminal configurations on patient wristbands, transmitter straps, or ankle anchors.
- **System Interoperability:** The transmitter architecture must feature validated native compatibility for direct low-voltage data connection with Accutech environmental safety platforms, ensuring non-latent signaling and secure credential validation across the facility's dedicated security network.

SYSTEM COMPONENTS

The 700400 LC 1400 Wireless Transmitter incorporates several fundamental integrated sub-modules and physical connection layouts:

- **Weather-Sealed Digital Logic PCB:** The primary multi-layer circuit assembly coated with protective conformal sealing compounds to isolate electronic components from moisture and dust intrusion.
- Internal Battery Power Matrix: Ruggedized, high-durability internal lithium cell layout featuring integrated low-power trace routing for multi-month continuous operational power delivery.
- **Heavy-Duty RF Transceiver Module:** Integrated dual-state transmission pathways dedicated to managing secondary perimeter alerts, localized zone triggers, or local bypass responses.
- **Low-Voltage Terminal Backplane:** Multi-position wire terminal block array designed for clean, reliable power, ground, and data activation communication line termination.
- **Vandal-Resistant Outer Chassis:** Heavy-duty commercial-grade composite or metal alloy junction enclosure providing structural impact protection and integrated grounding paths.

FEATURES AND BENEFITS

- **Centralized Boundary Awareness:** Consolidates remote patient tracking states down to a single monitoring focal point, greatly simplifying hardware footprints and reducing response times for clinical teams.
- Waterproof Wearable Resilience: Features an advanced environmental seal designed to withstand harsh operational elements, making it ideal for continuous client bathing, clinical cleanings, and high-traffic institutional use.
- **Proactive Battery Management:** Employs selectable power conservation states behind the activation matrix to guarantee flawless active lifespans and error-free operation over a 12+ month deployment cycle.
- **Vandal-Resistant Construction:** Built using impact-resistant structural components that safeguard internal electronic processing paths against high-traffic workspace hazards and deliberate tampering.
- **Validated Platform Interoperability:** Engineered for total compatibility out-of-the-box with established Accutech security environments, ensuring a unified approach to facility patient protection.

PRODUCT SPECIFICATION

Manufacturer	Accutech Healthcare Security Solutions
Product Model Name	LC 1400 Wireless Transmitter
Part Number / SKU	700400
Enclosure Protection Rating	Waterproof / Environmental Vandal-Resistant Seals
Operating Input Voltage	Internal Non-Replaceable Battery / Managed Low-Voltage Control Paths
Relay Contacts Configuration	Wireless Active RFID Proximity Telemetry Layouts

Interface Link Mechanism	Wireless RF Coupling for Power, Ground, and Signal Buses
Keypad/Tag Interface Type	Direct RF Activator/Deactivator Proximity Seating Alignment
Wander System Compatibility	Accutech ResidentGuard Series Access and Security Environments
Chassis Construction	Heavy-Duty Industrial Commercial-Grade Lightweight Composite Housing
Primary Target Environments	Memory Care Units, Senior Living Communities, Nursing Homes, Specialized Hospital Wings

COMPLIANCE AND CERTIFICATION

- **FCC Status:** Designed and certified to meet FCC Part 15 regulations regarding digital device shielding. This guarantees that multi-zone switching and transmitter paths do not cause or sustain harmful electromagnetic interference with nearby diagnostic medical devices or critical patient networks.
- **UL Listing:** Engineered and assembled using components compliant with UL safety classifications for low-voltage signal appliances, exterior access control equipment, and healthcare facility alert instrumentation.
- **RoHS Compliance:** Formulated in alignment with environmental protection directives, ensuring that the assembly, internal solder joints, and electronic trace configurations restrict the use of lead, mercury, and other hazardous materials.