ACCUTECH 712022

LC1400T TX Wand (Without Plug-in Power, With Bit) | Centralized Wander Management Infrastructure Hub



PRODUCT OVERVIEW

The Accutech 712022 LC1400T TX Wand (Without Plug-in Power, With Bit) 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 automated security credentials and peripheral radio frequency transmission parameters, 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 as an intermediate installation package or an expanded peripheral accessory within an existing elopement prevention perimeter, the 712022 module channels local tag-excitation fields. This specific product SKU includes a specialized installation drill bit to streamline physical surface mounting, while omitting a duplicate plug-in power adapter for environments pulling electrical current over the host communication bus. 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 resident areas 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 712022 LC1400T TX Wand to act as the primary external security access control and localized override node. The hardware must support direct serial bus integration configurations to synchronize active bypass states and resident telemetry data directly with peripheral zone controllers.
- **Healthcare Environment Protection:** The remote transmitter wand assembly shall incorporate a durable, fire-resistant vacuum-molded commercial-grade structural design explicitly engineered to sustain continuous clinical exposure, operating reliably across extreme temperature variations, direct moisture impacts, and high-traffic indoor corridor zones.
- **Access and Control:** The device physical interface shall feature a high-speed data transmission path to allow authorized clinical staff, security personnel, and facility supervisors to monitor localized tag interactions, log exit bypass commands, and process alarm resets directly at the security boundary.

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- **Enclosure and Durability:** The interior antenna elements and resonant transmission circuitry shall be protected inside a ruggedized, vandal-resistant vacuum-molded ABS enclosure optimized for low-profile physical attachment profiles near doorways, elevator frames, or hallways.
- **System Interoperability:** The transmitter wand architecture must feature validated native compatibility for direct low-voltage data connection with Accutech LC1400T controllers, ensuring non-latent RS485 signaling and secure credential validation across the facility's dedicated security network.

SYSTEM COMPONENTS

The 712022 LC1400T TX Wand (Without Plug-in Power, With Bit) incorporates several fundamental integrated sub-modules and physical connection layouts:

- **Conformal-Coated 131 kHz Resonance Coil:** The primary internal resonant transmission element designed to project a 360-degree electromagnetic boundary field to excite passing tracking bands.
- **RS485 High-Speed Communication Matrix:** Ruggedized, high-durability internal digital transceiver components dedicated to routing received resident ID telemetry to the parent controller at 115200 bps.
- **Stagger Tuning Control Circuitry:** An integrated electronic frequency management module configured to handle multi-frequency adjustment steps and prevent crossover node blind spots.
- **Low-Voltage Bus Termination Blocks:** Internal mechanical terminal connections designed for clean, reliable power and data signaling routing over a single composite connection layout.
- **Specialized Installation Hardware Bit:** A heavy-duty, tool-grade installation bit provided directly in the packaging matrix to facilitate clean, rigid fastener routing during physical setup.
- **Vacuum-Molded Fire-Rated ABS Case:** Heavy-duty commercial-grade protective outer shell providing structural impact protection and clean mounting tracks for high-traffic facility walls.

FEATURES AND BENEFITS

- **Centralized Boundary Awareness:** Consolidates localized resident tracking loops and peripheral signal perimeter states down to a single monitoring focal point, greatly simplifying hardware footprints and reducing response times for clinical teams.
- **Integrated Installation Tooling:** Packaged with a matching structural driver/drill bit to expedite physical mounting onto facility surfaces, reducing labor and hardware compatibility delays during deployment.
- **Wireless Stagger Tuning:** Employs built-in wireless stagger tuning capabilities to eliminate radio frequency overlaps, guaranteeing zero interference even when deployed near adjacent facility exits.
- **Workflow Workload Reduction:** Eliminates the need for a standalone auxiliary power adapter at the installation point by pulling power requirements through the host bus line, lowering overall healthcare workspace hazards.
- **Validated System Interoperability:** Engineered for total out-of-the-box compatibility with established Accutech LC1400T wander management networks, ensuring a unified approach to facility patient protection.

PRODUCT SPECIFICATION

Manufacturer	Accutech Healthcare Security Solutions
Product Model Name	LC1400T TX Wand (With Bit, No Power Adapter)
Part Number / SKU	712022
Core Target Frequency	Nominal 131 kHz Transmission Field (129 kHz to 137 kHz for Stagger Tuning)
Effective Detection Radius	Generates a Comprehensive 360° Field Coverage Up to 10 Feet

Communication Protocol	High-Speed RS485 Serial Interface Bus
Data Baud Rate	115200 bps
Operating Input Voltage	Minimum 15 VDC (Drawn Directly From Host Controller Bus)
Current Consumption	Maximum 250mA
Physical Dimensions	13.25″ Length x 2.50″ Width x 2.25″ Height
Net Structural Weight	1.0 US Pound
Chassis Enclosure Material	Vacuum-Molded Fire-Rated ABS Plastic
Operating Temperature Bounds	32°F to 120°F (0°C to 49°C)
Primary Target Environments	Senior Living Facilities, Memory Care Communities, Nursing Home Corridors, Elevators

COMPLIANCE AND CERTIFICATION

- **FCC Status:** Designed and certified to meet FCC Part 15 regulations regarding low-frequency intentional radiator configurations. This guarantees that multi-zone tracking fields and active RS485 communication steps do not cause or sustain harmful electromagnetic interference with nearby diagnostic medical devices or critical patient networks.
- **UL Listing:** Engineered and assembled using structural elements and internal circuit architectures compliant with UL safety classifications for low-voltage signal appliances, access control monitoring equipment, and fire-rated healthcare facility installations.
- **RoHS Compliance:** Formulated in alignment with environmental protection directives, ensuring that the vacuum-molded ABS shell, internal electronics, lead paths, and solder connections restrict the use of lead, mercury, and other hazardous materials.