ACCUTECH 702022

LC1400T Controller (With Plug-in Power and Bit) | Centralized Wander Management Infrastructure Hub



PRODUCT OVERVIEW

The Accutech 702022 LC1400T Controller 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 active RFID signals from tracking wristbands directly at monitored boundary points, it eliminates the operational complexity of managing individual zones. This centralized topology ensures that large-scale senior care, nursing home, memory care, and hospital facilities maintain instantaneous, real-time situational awareness.

Designed as an all-inclusive system gateway bundle, the 702022 module monitors a comprehensive 360-degree radius around itself at crucial entry or exit points to identify unauthorized egress attempts by monitored individuals. 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. Delivered complete with a dedicated plug-in power supply unit and an activation bit, this configuration provides installation teams with a comprehensive, ready-to-deploy kit to establish or expand secure door access portals without requiring extra auxiliary source hardware.

ARCHITECTS AND ENGINEERS (A&E) SPECIFICATION

- **System Infrastructure:** The contractor shall supply, install, and configure the Accutech 702022 LC1400T Controller to act as the primary external security access control and localized override node. The hardware bundle must support direct RFID signal receiving configurations to monitor resident wristbands and synchronize active perimeter bypass states directly with peripheral zone systems.
- **Healthcare Environment Protection:** The perimeter monitoring assembly shall incorporate a durable, lightweight fire-retardant ABS housing explicitly engineered to sustain continuous clinical exposure, operating reliably across standard high-traffic healthcare environments.
- **Access and Control:** The device physical interface shall feature a built-in high-speed RS485 communication port alongside a low-latency logic processor to allow authorized clinical staff, security personnel, and facility supervisors to pass freely or execute localized alarm resets directly at the physical boundary.

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

- **Enclosure and Durability:** The interior control components, internal piezo sounder, and tuning circuit assembly shall be protected inside a ruggedized, vacuum-molded commercial-grade housing optimized for surface-mount terminal configurations near doors, corridors, or elevators.
- **System Interoperability: T**he controller architecture must feature validated native compatibility for dry-contact and network-addressable connections, ensuring non-latent signaling, nurse call integration, and secure credential validation across the facility's dedicated security networks.

SYSTEM COMPONENTS

The 702022 LC1400T Controller (With Plug-in Power and Bit) configuration incorporates several fundamental integrated sub-modules and physical connection layouts:

- **Conformal-Coated LC1400T Processor PCB:** The primary internal multi-layer computing, logic control, and command processing board configured to run low-latency firmware and evaluate incoming sensor credentials.
- **Dual-Frequency RF Transceiver Array:** Integrated multi-frequency signaling paths containing a 131 kHz transmission circuit for field excitation alongside a 418 MHz receiver circuit dedicated to tracking active resident tags.
- **Dedicated Plug-In Power Adapter Module:** An external transformer block assembly meticulously matched to source steady operating currents directly through standard local power receptacles.
- **Specialized Installation/Activation Bit:** A heavy-duty, tool-grade installation and alignment bit provided directly in the packaging matrix to facilitate quick mechanical fastener setup and tuning.
- **High-Output Internal Piezo Sounder:** An integrated 85 dB acoustic annunciator designed to emit immediate, clear auditory warnings directly at the portal location when a wandering or tamper event occurs.
- **High-Speed RS485 Interface Port:** A ruggedized internal serial communication block dedicated to routing real-time telemetry, alarm statuses, and integration commands to host networks or call bells.
- **Fire-Retardant Vacuum-Molded Case:** A lightweight, commercial-grade impact-resistant ABS composite outer enclosure providing structural drop protection, clean surface aesthetics, and secure hardware mounting.

FEATURES AND BENEFITS

- **Centralized Boundary Awareness:** Consolidates multi-directional RFID tracking data and local entry/exit points down to a single compact focal point, greatly simplifying hardware footprints and reducing response times for clinical teams.
- **All-In-One Deployment Kit:** Packaged with its own dedicated plug-in power source and installation/activation bit tooling, minimizing field preparation time and lowering overall tool compatibility overhead.
- **Wireless Stagger Tuning:** Employs advanced wireless stagger tuning capabilities to eliminate radio frequency overlap, guaranteeing zero interference even when used in close conjunction with similar door systems.
- **Workflow Workload Reduction:** Minimizes staff overhead via an integrated high-speed RS485 port, enabling direct integration into complex networks or arrays of call bells and lowering overall workspace hazards.
- **Validated Platform Interoperability:** Engineered for total backward and forward compatibility, working natively with existing tracking systems and a variety of resident tag options to deliver unified patient protection.

PRODUCT SPECIFICATION

Manufacturer	Accutech Healthcare Security Solutions
Product Model Name	LC1400T Controller Bundle (With Power Plug and Bit)
Part Number / SKU	702022
Core Functionality	Standalone Perimeter Monitor, Entry Portal Access Control, and Wandering Alert Processor

Transmit Signal Frequency	Nominal 131 kHz (129-137 kHz for Stagger Tuning)
Receive Signal Frequency	418 MHz
Effective Detection Radius	Generates a Comprehensive 360° Field Coverage Up to 10 Feet
Included System Power Unit	Companion Low-Voltage Plug-In AC/DC Power Supply Adapter
Included Installation Accessories	(1) Custom Installation/Activation Tool Bit
Communication Protocol	High-Speed RS485 Interface Bus
Data Baud Rate	115200 bps
Internal Audio Output	Integrated Piezo rated at 85 dB at 10 Feet
Physical Dimensions	13.25″ Length x 2.50″ Width x 2.25″ Height
Net Structural Weight	1.2 US Pounds (Including Included Power Adapter & Bit Accessories)
Operational Temperature Bounds	32°F to 120°F (0°C to 49°C)
Chassis Enclosure Material	Lightweight, Vacuum-Molded Fire-Retardant ABS Composite

COMPLIANCE AND CERTIFICATION

- **FCC Status:** Fully tested, authorized, and labeled under FCC Part 15 digital device regulations. This certified design guarantees that local loop scanning, power transformation, and active multi-frequency transceiver steps do not introduce or sustain harmful electromagnetic interference across nearby diagnostic clinical devices or patient networks.
- **UL Listing:** Developed and engineered using interior assembly components compliant with UL industrial safety classifications for low-voltage signal appliances, entry monitoring hardware, and auxiliary healthcare resident safety tools.
- **RoHS Compliance:** Formulated in alignment with environmental protection directives, ensuring that the lightweight ABS housing, internal processing circuits, external power components, and tool materials strictly restrict the use of lead, mercury, polybrominated biphenyls, and other hazardous substances.