ACCUTECH 200628

Polycarb TX Antenna | Centralized Wander Management Infrastructure Hub



PRODUCT OVERVIEW

The Accutech 200628 Polycarb TX Antenna 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 precise frequency calibration data and timing synchronization metrics at protected boundaries, 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 within zone controllers, perimeter transmitter housings, transceiver enclosures, and restricted access zones, the 200628 module channels ultra-precise RF clock telemetry and operational frequency stabilization. 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 200628 Polycarb TX Antenna 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.
- **Perimeter Infrastructure Protection:** The remote frequency calibration 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 physical interface shall feature a heavy-duty, highly stable transmission path to allow authorized clinical staff, security personnel, and facility supervisors to execute localized door bypass commands and alarm resets directly at the security boundary.

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- **Enclosure and Durability:** The antenna electronic component assembly shall be protected inside a ruggedized, vandal-resistant polycarbonate commercial-grade housing optimized for flush-mount or surface-mount terminal configurations on walls, door frames, or controller chassis backplanes.
- **System Interoperability:** The transmission antenna 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 200640 Lexan Antenna Guard incorporates several fundamental integrated sub-modules and physical connection layouts:

- **Conformal Enclosure Protection:** The primary internal resonant transmission coil body assembly sealed within a protective casing to isolate electronic paths from background moisture, temperature shifts, and dust intrusion.
- **High-Impact Polycarbonate Housing:** Ruggedized, high-durability polymer exterior shell featuring optimized geometric configurations for clean surface installation and structural toughness.
- **Low-Loss Terminal Interface:** Integrated low-resistance connection terminals dedicated to managing incoming transmitter power loops, feedback circuits, or signal loops safely from the parent controller.
- **Low-Voltage Hardware Backplane:** Internal mechanical mounting and grounding layout designed for clean, reliable power routing and hardwired circuit line termination.
- **Vandal-Resistant Mounting Shield:** Heavy-duty commercial-grade framing providing structural impact protection and integrated structural anchoring paths for facility wall or door frame placement.

FEATURES AND BENEFITS

- **Centralized Boundary Awareness:** Consolidates system timing synchronization and transmitter frequency reference states down to a single monitoring focal point, greatly simplifying hardware footprints and reducing response times for clinical teams.
- **Precision Signal Transmission:** Features an advanced internal antenna transmission coil architecture engineered to provide stable, non-drift low-frequency excitation fields, ensuring optimal perimeter RF tag excitation and tag scanning reliability.
- **Minimized Signal Interference:** Employs an ultra-tight tolerance physical tuning matrix to minimize phase noise and signal jitter, eliminating data collision errors in multi-tag clinical environments.
- **Vandal-Resistant Polycarbonate Shell:** Built using high-impact, shatter-resistant polycarbonate 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	Polycarb TX Antenna Component
Part Number / SKU	200628
Component Technology Type	Low-Frequency Transmission Antenna / Exciter Field Generator
Nominal Operating Frequency	Tuned for High-Security Low-Frequency Excitation Bands

Enclosure Protection Rating	High-Impact Polycarbonate Structural Shield / Indoor Environmental Seals
Operating Input Voltage	Passive Signal Component (Managed Low-Voltage Control Paths via Parent Controller Module)
Interface Link Mechanism	Hardwired Terminal Block Layout for Power, Ground, and Signal Buses
Wander System Compatibility	Accutech ResidentGuard and Patient Security Environments
Chassis Construction	High-Impact, Heavy-Duty Industrial Commercial-Grade Polycarbonate Structural Polymer
Primary Target Environments	Daycare Centers, Non-Acute Healthcare Settings, Senior Living Facilities

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 board-level clock oscillator 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 structural materials, and metal or composite lead configurations restrict the use of lead, mercury, and other hazardous materials.