

ACCUTECH 700207

Band Removal Antenna | Centralized Wander Management Infrastructure Hub



PRODUCT OVERVIEW

The Accutech 700207 Band Removal 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 automated security credentials and wireless telemetry from patient wristbands, 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 at primary access points, protected corridors, and restricted facility exit zones, the 700207 module channels critical radio frequency telemetry from monitored patient tags back to the central security receiver. 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 700207 Band Removal 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.
- **Healthcare Environment Protection:** The remote antenna assembly shall incorporate a durable, compact 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 signal path to allow authorized clinical staff, security personnel, and facility supervisors to execute localized door bypass commands, tag status checks, and alarm resets directly at the physical boundary.

- **Enclosure and Durability:** The antenna element and internal conductor paths shall be protected inside a ruggedized, vandal-resistant commercial-grade housing optimized for flush-mount or surface-mount terminal configurations near perimeter doors or corridor ceilings.
- **System Interoperability:** The band removal 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 700207 Band Removal Antenna incorporates several fundamental integrated sub-modules and physical connection layouts:

- **Conformal-Coated Antenna Logic Array:** The primary internal resonant conductor and transceiver assembly coated with protective compounds to isolate electronic components from moisture and environmental intrusion.
- **High-Speed Signal Isolation Matrix:** Ruggedized, high-durability internal processing layout featuring integrated low-power RF trace routing to achieve accurate and rapid communication with monitored patient tags.
- **Heavy-Duty Coaxial Link Interface:** Integrated low-loss coaxial terminal connection pathways dedicated to routing received telemetry signals back to the parent receiver hub without attenuation.
- **Low-Voltage Hardware Backplane:** Internal mechanical mounting and termination array designed for clean, reliable power, ground, and data communication shielding over radio frequencies.
- **Vandal-Resistant Outer Chassis:** Heavy-duty commercial-grade composite protective enclosure providing structural impact protection and an ultra-low profile for facility wall or ceiling placement.

FEATURES AND BENEFITS

- **Centralized Boundary Awareness:** Consolidates remote patient wristband tracking and unauthorized tamper communication states down to a single monitoring focal point, greatly simplifying hardware footprints and reducing response times for clinical teams.
- **Enhanced Tamper Tracking:** Features a highly directional reception pattern engineered to intercept immediate alert transmissions if a patient bracelet is cut, opened, or removed without authorization.
- **Automated Logic Response:** Employs rapid RF signal-handling paths behind the antenna elements to guarantee flawless automated perimeter locking and error-free operation when an unauthorized band removal event occurs.
- **Workflow Workload Reduction:** Built using dependable structural components that automate emergency alerts, minimizing the need for constant manual checks and lowering overall healthcare workspace hazards.
- **Validated System Compatibility:** Engineered for total out-of-the-box interoperability with established Accutech ResidentGuard security environments, ensuring a unified approach to facility patient protection.

PRODUCT SPECIFICATION

Manufacturer	Accutech Healthcare Security Solutions
Product Model Name	Band Removal Antenna
Part Number / SKU	700207
Target Carrier Frequency	Tuned for 418 MHz High-Security Wireless Band Signaling Paths
Enclosure Protection Rating	Tamper-Resistant Low-Profile Housing / Environmental Moisture Seals

Interface Link Mechanism

Wired Coaxial Coupling for Secure Power, Ground, and Signal Buses

Wander System Compatibility

Accutech ResidentGuard Series Access and Security Environments

Chassis Construction

Heavy-Duty Industrial Commercial-Grade Impact-Resistant ABS Composite

Primary Target Environments

Main Entrances, Staff Access Doors, Elevators, Memory Care Units, Pediatric Wards

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 active infrared transmission 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 electronic trace configurations restrict the use of lead, mercury, and other hazardous materials.