

ACCUTECH 300002

Central Alarm Speaker | Centralized Wander Management Infrastructure Hub



PRODUCT OVERVIEW

The Accutech 300002 Central Alarm Speaker 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 audible notification telemetry from monitored entry 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.

Deployed directly at primary nurse stations, main reception desks, high-traffic corridors, and restricted facility exit zones, the 300002 module channels clear, non-latent alarm acoustics and status broadcasts. 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 300002 Central Alarm Speaker 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 notification and audio 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, highly efficient acoustic voice coil layout 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 audio driver and matching transformer assembly shall be protected inside a ruggedized, vandal-resistant commercial-grade housing optimized for flush-mount or surface-mount terminal configurations on walls, ceilings, or master desk consoles.
- **System Interoperability:** The central notification speaker 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 300002 Central Alarm Speaker incorporates several fundamental integrated sub-modules and physical connection layouts:

- **Conformal-Coated Transducer Assembly:** The primary internal cone, magnet structure, and voice coil assembly coated with protective compounds to isolate acoustic paths from moisture and environmental intrusion.
- **High-Speed Signal Decoupling Transformer:** Ruggedized, high-durability internal matching layout featuring integrated low-power trace routing to achieve accurate and rapid communication with audio amplifier loops.
- **Heavy-Duty Terminal Block Interface:** Integrated compression-screw wire terminal pathways dedicated to managing secondary loop paths, audio input lines, or local bypass notification response leads safely.
- **Low-Voltage Hardware Backplane:** Internal mechanical mounting and grounding array designed for clean, reliable power, shield ground, and audio signal line termination.
- **Vandal-Resistant Outer Case Shield:** Heavy-duty commercial-grade protective outer enclosure providing structural impact protection and clean acoustic dissipation for ceiling or surface mount placement.

FEATURES AND BENEFITS

- **Centralized Boundary Awareness:** Consolidates multi-zone perimeter alarms and audible alert communication states down to a single monitoring focal point, greatly simplifying hardware footprints and reducing response times for clinical teams.
- **High-Intelligibility Acoustic Output:** Features an advanced industrial-grade driver design engineered to emit clear, high-decibel alert broadcast sweeps that slice through dense background clinical facility ambient noise.
- **Optimized Frequency Tuning:** Employs precise voice coil calibration parameters behind the protective grille to deliver distinct, error-free tone annunciations when a perimeter breach or tamper event occurs.
- **Workflow Workload Reduction:** Built using dependable structural components that automate acoustic signaling, minimizing the need for manual check interventions and lowering overall healthcare workspace hazards.
- **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	Central Alarm Speaker Notification Module
Part Number / SKU	300002
Acoustic Signaling Technology	High-Efficiency Audio Transducer / Voice-Coil Annunciator
Enclosure Protection Ratingposition	Tamper-Resistant Surface Configuration / Environmental Core Seals

Operating Input Voltage

Low-Voltage Audio Line Drive (Managed via Parent Master Control Station Panel)

Interface Link Mechanism

Hardwired Screw-Terminal Compression Block for Power, Ground, and Audio Signal Buses

Wander System Compatibility

Accutech ResidentGuard Series Access and Security Environments

Primary Target Environments

Central Nurse Stations, Main Hallways, Secure Entrances, Desk Consoles

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 internal speaker wire 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 speaker assembly, magnet structure, internal solder joints, and grille materials restrict the use of lead, mercury, and other hazardous materials.