

Accutech 770277 1-16 Zone Multiplexer

Centralized Wander Management Infrastructure Hub



PRODUCT OVERVIEW

The Accutech 770277 1-16 Zone Multiplexer 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 signals from up to 16 separate doorways, corridors, or restricted areas, 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 in primary equipment rooms or central IT server closets, the 770277 channels incoming sensor telemetry over a single high-integrity bus. This proactive routing method eliminates communication bottlenecks and guarantees that complex localized data is instantly translated into visible alerts. This active data processing ensures absolute protection across expansive hospital wings, long care facility corridors, and high-risk infant protection perimeters.

ARCHITECTS AND ENGINEERS (A&E) SPECIFICATION

- **System Infrastructure:** The contractor shall supply, install, and configure the Accutech 770277 Zone Multiplexer to act as the central interface node between exit zone sensors and the master control console. The hardware must inherently support the aggregation of up to sixteen (16) discrete detection zones into a single processing unit.
- **System Compatibility:** The multiplexer appliance must feature validated native compatibility for direct integration with the Accutech IS 3200 and BR 4200 environmental safety platforms.
- **Data Communications:** The device shall incorporate a hardware-level RS-232 serial communication interface to maintain data integrity and rapid, non-latent alarm signaling to peripheral telemetry and monitoring stations.
- **Enclosure and Durability:** The electronics assembly shall be protected inside a heavy-duty, commercial-grade rigid metal housing optimized to withstand harsh environmental constraints and facility maintenance impacts.
- **Modular Expandability:** The internal bus architecture must accommodate field-upgradable board configurations within the original physical chassis to scale zone monitoring capacity upward without demanding full enclosure replacement.

SYSTEM COMPONENTS

The 770277 Multiplexer incorporates several fundamental integrated sub-modules and physical connection layouts:

- **Main Multiplexer Logic PCB:** The primary multi-layer circuit assembly managing high-speed digital stream commutation from zone sensors to the main bus.
- **RS-232 Serial Interface Module:** Integrated serial communication driver port dedicated to server, computer, or controller data relay.
- **Scalable Bus Slots:** Expansion slots situated on the backplane for adding secondary input zone boards directly inside the enclosure.
- **Heavy-Duty Metal Chassis:** Rigid physical steel or aluminum junction box providing physical security, thermal management, and physical grounding.

FEATURES AND BENEFITS

- **High-Density Centralized Monitoring:** Consolidates up to 16 separate zones down to a single monitoring focal point, greatly simplifying hardware footprints and reducing cable infrastructure requirements.
- **Real-Time Guard Verification:** Supplies continuous telemetry and alarm reporting data from across the property, letting staff intercept unauthorized zone entries immediately.
- **Validated Platform Interoperability:** Engineered for total compatibility out-of-the-box with established Accutech security environments (IS 3200 / BR 4200).
- **Industrial Structural Protection:** The ruggedized metallic housing safeguards internal electronic processing paths against high-traffic workspace hazards.
- **Future-Proof Cost Savings:** Modular expansion capabilities allow healthcare properties to scale zone counts seamlessly over time, mitigating full replacement costs when facilities expand or renovate.

PRODUCT SPECIFICATION

Manufacturer	Accutech Security (An ICS Company)
Product Model Name	1-16 Zone Multiplexer (Centralized Hub)
Part Number / SKU	770277
Zone Input Capacity	1 to 16 Independent Zones
Operating Input Voltage	12V DC (Regulated Power Supply Source)
Data Interface Connection	RS-232 Standard Serial Interface Port
Wander System Compatibility	Accutech IS 3200 and BR 4200 Architectures
Chassis Construction	Industrial Sturdy Metal Box
Primary Target Environments	Hospitals, Long-Term Care, Assisted Living, Memory Care

COMPLIANCE AND CERTIFICATION

- **FCC Status:** Designed and certified to meet FCC Part 15 regulations regarding digital device shielding. This guarantees that multi-zone radio frequency switching and serial communications 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, access control systems, and healthcare facility alert instrumentation.
- **RoHS Compliance:** Formulated in alignment with environmental protection directives, ensuring that the assembly, internal solder joints, and electronic trace configurations restrict the use of lead, mercury, and other hazardous materials.