

ACCUTECH ACT-PR103

Proximity Reader with Keypad | Centralized Wander Management Infrastructure Hub



PRODUCT OVERVIEW

The Accutech ACT-PR103 Proximity Reader with Keypad 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 localized multi-credential authentication signals from protected entry points, 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 high-traffic egress boundaries, nurse monitoring desk lines, and restricted access zones, the ACT-PR103 module channels dual-layer authorization telemetry. 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 ACT-PR103 Proximity Reader with Keypad 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 reader and keypad 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 front interface shall feature a heavy-duty, tactile matrix numeric keypad combined with a contactless proximity scanner 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 electronics assembly shall be protected inside a ruggedized, vandal-resistant commercial-grade housing optimized for flush-mount or surface-mount terminal configurations on standard electrical boxes or architectural door frames.
- **System Interoperability:** The proximity reader and keypad 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 ACT-PR103 Proximity Reader with Keypad incorporates several fundamental integrated sub-modules and physical connection layouts:

- **Weather-Sealed Digital Logic PCB:** The primary multi-layer microprocessor control and transceiver assembly coated with protective conformal sealing compounds to isolate electronic components from moisture and dust intrusion.
- **Commercial-Grade Proximity Antenna:** Ruggedized, high-durability internal inductive antenna component featuring high-speed radio frequency coupling paths for instant contactless card scanning.
- **Heavy-Duty Backlit Keypad Module:** Integrated dual-state numeric keypad pathways featuring durable wear-resistant keys dedicated to managing localized PIN entry and local configuration commands.
- **Low-Voltage Terminal Backplane:** Multi-position wire terminal blocks or pre-wired lead pigtail pathways designed for clean, reliable power, ground, tamper alerts, and data activation communication line termination.
- **Vandal-Resistant Single-Gang Faceplate:** Heavy-duty commercial-grade composite housing providing structural impact protection and integrated grounding paths.

FEATURES AND BENEFITS

- **Centralized Boundary Awareness:** Consolidates multi-credential perimeter override and timed bypass states down to a single monitoring focal point, greatly simplifying hardware footprints and reducing response times for clinical teams.
- **Dual-Layer Authentication Security:** Features a combined proximity card scanner and integrated physical numeric keypad layout engineered for flexible authorization, allowing for card-only, PIN-only, or higher-security card+PIN verification.
- **Tactile Backlit Keypad Matrix:** Employs an illuminated, high-visibility keyboard matrix behind the front interface to guarantee reliable code entry and manual programming in low-light facility corridors or dark emergency exit paths.
- **Vandal-Resistant Weatherproof Construction:** Built using impact-resistant structural components and a heavy-duty single-gang profile 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	Proximity Reader with Keypad
Part Number / SKU	ACT-PR103
Credential Technology	Contactless Proximity Card (125 kHz RFID) and Integrated Numeric Keypad PIN
Enclosure Protection Rating	Single-Gang Surface or Flush Mount / Weather-Resistant Vandal Shield

Operating Input Voltage

Passive Structural Hardware (Managed Low-Voltage Control Paths via Parent Component)

Interface Link Mechanism

Pass-Through Clearance Channels for Power, Ground, and Signal Buses

Wander System Compatibility

Accutech ResidentGuard and Cuddles Access Security Environments

Chassis Construction

Heavy-Duty Industrial Commercial-Grade ABS Composite Housing Assembly

Primary Target Environments

Main Entrances, Nurses' Monitoring Stations, Elevators, Pharmacies, Perimeter Egress Frames

COMPLIANCE AND CERTIFICATION

- **FCC Status:** Designed and certified to meet FCC Part 15 regulations regarding digital device shielding. This guarantees that multi-zone switching, RFID scanning paths, and hardwired data loops 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 solder joints, and electronic trace configurations restrict the use of lead, mercury, and other hazardous materials.