

ACCUTECH ACT-PR640H

Access Control Keypad and Proximity Reader | Centralized Wander Management Infrastructure Hub



PRODUCT OVERVIEW

The Accutech ACT-PR640H Access Control Keypad and Proximity Reader 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 combining dual-layer credential validation—tactile digital PIN code entry and high-frequency proximity card scanning—into a single low-profile device, 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 controlled exit frames, staff-only partitions, and high-risk boundary doorways, the ACT-PR640H channels secure credential telemetry over a high-integrity communication bus. This proactive routing method eliminates communication bottlenecks and guarantees that complex localized data—such as staff bypass events, visitor clearance requests, and unauthorized keypad attempts—is instantly translated into visible alerts. This active tracking processing ensures absolute protection across expansive hospital wings, long care facility corridors, and high-risk infant protection zones by ensuring that only authorized personnel can temporarily deactivate door containment loops.

ARCHITECTS AND ENGINEERS (A&E) SPECIFICATION

- **System Infrastructure:** The contractor shall supply, install, and configure the Accutech ACT-PR640H Access Control Keypad and Proximity Reader to act as the primary local credential validation and door bypass interface node. The hardware must support direct integration configurations to synchronize active bypass states directly with peripheral zone controllers.
- **Dual-Layer Authentication:** The entry assembly shall incorporate a built-in contactless RFID proximity antenna working in seamless synchronization with a physical, backlit tactile digital keypad matrix to support single-factor or multi-factor authentication (Card, PIN, or Card+PIN) for security overrides.
- **Notification and Feedback:** The reader interface must incorporate localized multi-color LED visual arrays paired with an internal acoustic alert sounder to actively communicate distinct operational states, including authorized credential access, invalid entry attempts, and system lockout states.

- **Enclosure and Structural Integration:** The electronics assembly shall be protected inside an impact-resistant, commercial-grade rigid housing optimized for flush-mount or surface-mount terminal configurations on standard single-gang electrical utility boxes or narrow door mullions.
- **System Interoperability:** The reader 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-PR640H Access Control Keypad and Proximity Reader incorporates several fundamental integrated sub-modules and physical connection layouts:

- **Integrated Proximity Reader Antenna:** Internal high-sensitivity electromagnetic induction coil engineered for continuous scanning of compatible proximity cards, key fobs, and active personnel credentials.
- **Backlit Tactile Key Matrix:** Ruggedized, high-durability front keypad layout featuring integrated low-power LED backlighting for clear visibility during nighttime operations.
- **Solid-State Control Logic PCB:** The primary multi-layer circuit assembly managing credential transmission parsing, multi-color LED steering, and signal output processing.
- **Low-Voltage Terminal Backplane:** Multi-position wire terminal block array or standardized wire harness designed for clean, reliable power, ground, and communication data bus line termination.
- **Secure Single-Gang Chassis:** Impact-resistant commercial-grade composite enclosure providing physical structural protection, clean faceplate snapping, and integrated grounding paths.

FEATURES AND BENEFITS

- **Centralized Access Awareness:** Consolidates remote exit bypass telemetry down to a single monitoring focal point, greatly simplifying hardware footprints and reducing response times for clinical teams.
- **Dual-Layer Authentication Security:** Restricts sensitive perimeter doors by requiring card presentation, code entry, or both, ensuring maximum prevention against unauthorized credential duplication or sharing.
- **Adaptive Visual Backlighting:** Employs soft LED backlighting behind the key matrix to guarantee flawless credential entry and error-free operation during low-light or night shifts.
- **Multi-Tone Sensory Verification:** Pairs high-visibility LED changes with an adjustable internal acoustic sounder to give staff immediate, undeniable confirmation of successful door deactivation.
- **Validated Platform Interoperability:** Engineered for total compatibility out-of-the-box with established Accutech access control boards and wander management environments, ensuring a unified approach to facility patient protection.

PRODUCT SPECIFICATION

Manufacturer	Accutech Healthcare Security Solutions
Product Model Name	Access Control Keypad and Proximity Reader
Part Number / SKU	ACT-PR640H
Credential Verification Modes	Proximity Card, Digital PIN Code, or Combined Card+PIN
Operating Input Voltage	12V DC / 24V DC Managed Low-Voltage Control Paths
Interface Link Mechanism	Hardwired Terminals / Wire Harness for Power, Ground, and Data Buses

Communication Protocol Outputs

Standardized Wiegand Data / Custom Accutech Bus Signaling

Status Indicators

Integrated Multi-Color Status LED Arrays & Audible Piezo Beeper

Wander System Compatibility

Accutech ResidentGuard Series Access and Security Environments

Chassis Construction

Industrial Commercial-Grade Housing Assembly (Single-Gang Form)

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-frequency proximity card switching and internal logic 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, access control system units, proximity readers, 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.