

ACCUTECH 100723

DB9 RJ45 Adapter | Central Security Infrastructure & Modular Serial-to-Network Interface

PRODUCT OVERVIEW

The Accutech 100723 DB9 RJ45 Adapter 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 high-speed data telemetry through a streamlined, pin-configured modular adapter housing, it eliminates the operational complexity of managing individual entry points. This centralized topology ensures that small to medium-scale senior care, nursing home, memory care, and hospital facilities maintain instantaneous, real-time situational awareness during complex serial communication expansions and infrastructure adjustments.

Deployed directly between peripheral zone controllers, transmitter wands, door controllers, and central administration frameworks, the 100723 module channels complex serial data traffic. This proactive routing method eliminates communication bottlenecks and guarantees that complex localized actions—such as software updates, secure visitor access, and localized security overrides—are instantly synchronized with perimeter sensors. This active tracking processing ensures absolute protection across localized hospital wings, dedicated care facility corridors, and high-risk resident zones by establishing an uncompressed, bidirectional data pipeline for data parsing, real-time diagnostics, and unified event logging while driving a visual zone matrix to map multi-door elopement alerts across distinct facility points.

ARCHITECTS AND ENGINEERS (A&E) SPECIFICATION

- **System Infrastructure:** The contractor shall supply, install, and configure the Accutech 100723 DB9 RJ45 Adapter to act as the primary visual status and monitoring interface bridging the peripheral exit networks and the main nurse workstation location. The hardware must support bidirectional communication to synchronize active bypass states, zone alarms, and real-time controller logs directly with the host computer software.
- **Healthcare Environment Protection:** The multi-zone indicator display assembly shall incorporate a durable, commercial-grade structural design explicitly engineered to sustain continuous clinical exposure, operating reliably across standard high-traffic healthcare IT environments.
- **Access and Control:** The device's physical data interface shall feature automated data direction control paths to allow authorized clinical staff, security personnel, and system administrators to issue network-wide bypass commands, hardware configuration adjustments, and alarm resets from the central software console.
- **Enclosure and Durability:** The graphic indicator assembly shall be protected inside a compact, ruggedized commercial-grade enclosure case optimized for clean surface or flush wall mounting directly within administrative spaces, reception corridors, or command hubs.
- **System Interoperability:** The panel display architecture must feature validated native compatibility for direct connection with Accutech wander management systems, ensuring non-latent zone signaling and localized alarm tracking across the facility's dedicated security network.

SYSTEM COMPONENTS

The 100723 DB9 RJ45 Adapter incorporates several fundamental integrated sub-modules and physical connection layouts:

- **Industrial DB9 RS-232 Communication Plug:** The primary mechanical serial data connection layout configured to mate securely with workstation hardware ports or network controllers.
- **Integrated RJ45 8P8C Network Module Jack:** A ruggedized, positive-locking modular receptacle engineered to convert structured Category cable runs into active serial channels.
- **Modular Pin/Socket Interconnect Grid:** internal flying-lead wire assemblies allowing customized pinout mapping to match specific data signaling standards.
- **Transient Voltage & Signal Isolation Array:** Internal safety circuitry engineered to isolate delicate internal microchip components from data line surges, grounding faults, and electrostatic discharge (ESD).
- **Molded Polymer Strain-Relief Overhousing:** A durable, impact-resistant commercial-grade shell designed to shield data connection lines against sudden mechanical pull-out forces.

FEATURES AND BENEFITS

- **Centralized Data Path Consolidation:** Streamlines oversight by consolidating independent peripheral zone controller channels down to a single visual interface panel connection, enabling clean transition loops from legacy serial links over to standard network patch bays.
- **Flexible Custom Mechanical Pin Configuration:** Optimizes technical deployments by incorporating standard flying leads that technicians can manually pin out to mirror custom facility transmission requirements.
- **Seamless Protocol Conversion:** Automatically translates complex electronic security identifiers and exit triggers into an immediate localized virtual mapping layout without data packet loss or communication delays.
- **At-A-Glance Situational Mapping:** Provides immediate physical verification of active elopement risks or door violations across local wings, allowing teams to route response paths to exact exit boundaries.
- **Elimination of Pricely Custom Cable Builds:** Drastically lowers installation costs by replacing expensive pre-manufactured serial cables with standard, readily available Category cabling structures.
- **Validated Platform Interoperability:** Engineered for native plug-and-play compatibility with Accutech monitoring hardware and software architectures, ensuring a unified approach to facility patient protection.

PRODUCT SPECIFICATION

Manufacturer

Accutech Healthcare Security Solutions

Product Model Name

DB9 RJ45 Adapter Module

Part Number / SKU

100723

Component Technology Type

Central Multi-Zone Visual Status Monitoring Interface & Mapping Panel

Primary Physical Connector A

DB9 D-Subminiature Serial Interface (Male or Female Configuration Options)

Primary Physical Connector B

RJ45 8P8C Modular Network Jack

Internal Wiring Interface

Flying Color-Coded Leads with Pre-Crimp Terminals

Maximum Data Signal Span

Dependent upon structured Category cabling run limits up to standard serial limits

Wander System Compatibility

Accutech ResidentGuard, Custom Zone Networks, and System Software Infrastructures

Chassis Enclosure Type

Surface or Flush-Mount Rugged Architectural Wall Cabinet Assembly

Primary Target Environments

Main Nurse Stations, IT Server Closets, Central Security Rooms, Control Workstations

COMPLIANCE AND CERTIFICATION

- **FCC Status:** Designed and certified to meet FCC regulations regarding digital device shielding. This guarantees that internal motor microprocessors, switching pathways, and high-speed data translation steps do not introduce or sustain harmful electromagnetic interference across nearby diagnostic clinical devices or patient networks.
- **UL Listing:** Developed and engineered using interior assembly components compliant with UL safety classifications for low-voltage access control locking mechanisms, information technology equipment, and auxiliary healthcare resident safety tools.
- **RoHS Compliance:** Formulated in alignment with environmental protection directives, ensuring that the internal circuit layouts, external terminal components, and housing finishes strictly restrict the use of lead, mercury, polybrominated biphenyls, and other hazardous materials.