ACCUTECH 500224

15VDC 2AMP Switching Power Supply | Centralized Wander Management Infrastructure Hub



PRODUCT OVERVIEW

The Accutech 500224 15VDC 2AMP Switching Power Supply 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 clean, regulated electrical signals to localized controllers, receivers, and 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 inside electrical equipment enclosures, technical utility closets, and near critical egress pathways, the 500224 module channels highly stable power 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 500224 15VDC 2AMP Switching Power Supply 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.
- **Power Infrastructure Protection:** The remote power 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, regulated power distribution topology to allow authorized clinical staff, security personnel, and facility supervisors to execute localized door bypass commands and alarm resets directly at the hardware 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 within master control cabinets or localized junction boxes.
- **System Interoperability:** The switching power supply 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 500224 15VDC 2AMP Switching Power Supply incorporates several fundamental integrated sub-modules and physical connection layouts:

- **Weather-Sealed Digital Logic PCB:** The primary multi-layer transformer circuit assembly coated with protective conformal sealing compounds to isolate electronic components from moisture and dust intrusion.
- **Backlit Tactile Status Indicator:** Ruggedized, high-durability front interface layout featuring integrated low-power LED backlighting for clear visibility of live power output during nighttime operations.
- **Heavy-Duty Power Output Module:** Integrated dual-state solid-state component pathways dedicated to managing secondary electrical distribution, filtered voltage regulation, or local bypass power triggers.
- **Low-Voltage Terminal Backplane:** Multi-position wire terminal block or barrel connection array designed for clean, reliable power, ground, and communication line termination.
- **Vandal-Resistant Outer Chassis:** Heavy-duty commercial-grade composite or metal alloy protective enclosure providing structural impact protection and integrated grounding paths.

FEATURES AND BENEFITS

- **Centralized Boundary Awareness:** Consolidates remote patient tracking states down to a single monitoring focal point, greatly simplifying hardware footprints and reducing response times for clinical teams.
- **Waterproof Wearable Resilience:** Features an advanced environmental seal designed to withstand harsh operational elements, making it ideal for continuous client bathing, clinical cleanings, and high-traffic institutional use.
- **On-Board Programmability:** Employs configurable firmware states behind the activation matrix to guarantee individualized patient settings, customized ID assignment, and error-free operation over its deployment lifecycle.
- **Vandal-Resistant Construction:** Built using impact-resistant structural components 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	15VDC 2AMP Switching Power Supply
Part Number / SKU	500224
Enclosure Protection Rating	Commercial-Grade / Heat-Dissipating Vent Seals
Operating Input Voltage	100V–240V AC Standard Mains (Managed Low-Voltage Control Paths)
Operating Output Rating	15V DC @ 2.0 Amps Regulated Power Delivery

Relay Contacts Configuration	Solid-State Switching Rectifier Circuitry (Form C Power Output Layouts)
Interface Link Mechanism	Hardwired Terminals / Contacts for Power, Ground, and Low-Voltage Output Buses
Keypad/Power Backlighting	Integrated Low-Power LED Live Output Illumination Indicator
Wander System Compatibility	Accutech ResidentGuard Series Access and Security Environments
Chassis Construction	Heavy-Duty Industrial Commercial-Grade Protective Housing
Primary Target Environments	Electrical Enclosures, Server Rooms, Equipment Closets, Localized Door Control 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 and transformer power 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, commercial access control power supplies, 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.