

Accutech 500253 15VDC 4.5AMP Power Supply

15VDC4.5AMPPowerSupply | High-Reliability System Power Engine



PRODUCT OVERVIEW

The **Accutech 500253 15VDC 4.5AMP Power Supply** is a commercial-grade, highly regulated linear-switching power delivery unit specifically engineered to run Accutech's wander management and infant protection infrastructure. This unit acts as a clean primary energy hub, delivering stable, ripple-free power to localized zone controllers, external keypad bypass modules, and electronic lock assemblies.

By leveraging an efficient solid-state regulation architecture, the 500253 prevents fluctuating line voltages and transient surges from interrupting critical patient protection networks. It provides the reliable, uninterrupted power flow necessary for continuous monitoring at healthcare facility exit points.

ARCHITECTS AND ENGINEERS (A&E) SPECIFICATION

- **Electrical Conversion:** The power supply assembly shall accept a nominal input voltage rating of 120VAC at 60Hz and step it down to a continuous, regulated output of 15VDC.
- **Current Output & Overhead:** The unit must deliver a continuous current capacity of up to 4.5 Amps under full load conditions without experiencing voltage sag or excessive thermal buildup.
- **Circuit Protection:** The power system must feature self-resetting thermal fuses or short-circuit over-current protections to prevent downstream component damage during field faults.
- **Form Factor Enclosure:** The power system shall be houseable within a secure structural steel or heavy-duty compact cabinet to prevent unauthorized access or physical tampering.

SYSTEM COMPONENTS

The 500253 configuration operates as the foundational power source for regional door security zones, encompassing:

- **Power Core Module:** The Accutech 500253 transformer and solid-state regulator board sub-assembly.
- **AC Input Lead Hardware:** Heavy-duty commercial three-prong alternating current interface cabling.
- **Terminal Blocks:** High-integrity screw-down terminals for clean, secure low-voltage DC out-routing.
- **Mounting Assembly:** Integrated chassis ground points and chassis mounting brackets for seamless electrical enclosure integration.

FEATURES AND BENEFITS

- **Optimized 15VDC Infrastructure:** Provides the exact voltage profile required by Accutech zone controllers to ensure maximum RF signal range and long-term hardware life.
- **Clean Low-Noise Output:** Employs integrated linear output smoothing to filter out line noise, preventing interference with sensitive patient tags or receiver loops.
- **Thermal Dissipation Chassis:** The open-frame/ventilated chassis design rejects heat efficiently, ensuring structural longevity and stable 24/7 continuous operation.
- **Simplified Field Wiring:** Large, clearly labeled terminal strip screws reduce connection errors and streamline installation on complex job sites.
- **Resilient Short-Circuit Recovery:** Automatically resets once external wiring faults or short circuits are cleared, reducing emergency service callouts.

PRODUCT SPECIFICATION

Manufacturer	Accutech Security (An ICS Company)
Product Model Name	15VDC 4.5AMP Power Supply
Part Number / SKU	500253
Primary Input Voltage	120V AC @ 60Hz Baseline
Regulated Output Voltage	15V DC Continuous
Maximum Continuous Current	4.5 Amps
Output Waveform Profile	Filtered Regular Low-Ripple DC
Application Environment	Indoor Commercial / Enclosure Mounted

COMPLIANCE AND CERTIFICATION

- **UL Listed Core Sub-Components:** Built using UL-recognized components to comply with institutional low-voltage life safety building standards.
- **FCC Part 15 Class A Baseline:** Engineered to keep high-frequency emissions well within limits, protecting neighboring medical monitors and telemetry from interference.
- **NFPA 70 National Electrical Code:** Meets Class 2 power-limited wiring safety requirements for secure placement inside healthcare facility walls.
- **RoHS Certified:** Built completely free of hazardous substances like lead and mercury, ensuring compliance with green building initiatives.