



Andover Continuum™

Power Supplies with UPS

- Power Supply Modules Provide 24 VDC Power and Battery-Backed UPS Power to Andover Continuum NetController CPU and I/O Modules
- Choice of 85 Watt or 50 Watt Models
- Built-in Battery Charger
- Selection of Programmable Battery Backup Modes via Andover Plain English Programming
- Non-UPS Models Available for Use as an Extended Power Source
- -48 VDC Model Available for Telecommunications Use
- DIN Rail Mounting and Slide-Together Connectors for Easy Installation

The Andover Continuum PS 120/240 AC 50-U and the PS 120/240 AC 85-U power supply modules are designed to provide 24 VDC power for the Andover Continuum NetController CPU module and its associated Andover Continuum I/O modules. In addition, both models provide full UPS battery backup in the event of an AC line failure.

The PS 120/240 AC 50-U and the AC 85-U power supplies are part of the Andover Continuum Ethernet-based intelligent building system. The Andover Continuum system allows you to cost-effectively mix and match DIN rail-mounted CPU, power supply, and various combinations of I/O modules and user interfaces to meet your control and monitoring needs.

Both models offer an impressive array of features that reduce or eliminate the impact of power failure. In both, a built-in battery charger provides 15 watts maximum to the battery. The charger is current limited to prevent overloading the power supply in the event of a shorted or defective battery. Using standard rechargeable lead acid batteries (not included), the 50-U model will provide full UPS operation including all I/O modules for up to 60 minutes at 35 watts power consumption; the 85-U model provides 30 minutes full UPS at 70 watts. Both allow for full operation of the CPU module only (including modem and network interface) with no I/O power for four hours; or backup of DRAM and real-time clock for 72 hours duration. These backup modes can

be selected and controlled through Andover Plain English™ programming. Maximum charging time of the battery charger is 48 hours using recommended batteries. Two 12V 7.0 AHr sealed rechargeable batteries are required with both models (not included). Extended backup times are available using larger batteries.

The UPS circuit provides the Andover Continuum CPU with two status signals indicating the operating condition of the power supply — one signal indicates an AC power failure and a change over to UPS mode and the other signal indicates when the battery voltage has reached an unsafe discharge level and will soon shutdown. A disconnect switch removes the battery and prevents further discharge of the battery.

A connector located on the bottom of the power supply is provided for an optional Main Power indicator LED. This option is ideal if you mount your Andover Continuum system within a larger control panel or enclosure and wish to verify power to the system from a separate location.

The power supply module features a sleek, lightweight casing designed for natural convection cooling. Built-in quick-release fasteners at the back of the module are provided for DIN rail mounting — no tools required. These fasteners also snap into a locked position for panel mounting. The power supply is designed for mounting in an optional NEMA 1-style Andover Continuum enclosure.

OTHER AVAILABLE MODELS

PS 120/240 AC 85

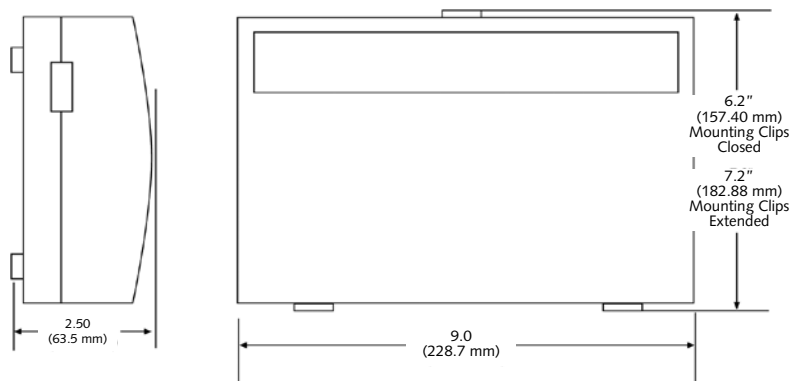
A non-UPS version, the PS 120/240 AC 85, is also available. This power supply can also be used as an extended power source to power additional I/O modules directly, extending the capabilities of a typical Andover Continuum system, even to remote locations. Because there is no built-in battery charger in this model, a full 85 watts of power is available.

PS 120/240 AC 50

A non-UPS version, the PS 120/240 AC 50, is also available. This power supply can also be used as an extended power source to power additional I/O modules directly, extending the capabilities of a typical Andover Continuum system, even to remote locations. Because there is no built-in battery charger in this model, a full 50 watts of power is available.

PS -48 DC 50

A PS -48 DC 50 model is available. This model accepts power from -41 to -53 VDC and allows industries such as telecommunications to provide uninterrupted power to critical environmental monitoring and control equipment using their own battery-backed power systems.



Dimension Drawing

SPECIFICATIONS

Andover Continuum Power Supplies with UPS

ELECTRICAL

Input Voltages:

100 to 240 VAC, 50/60 Hz
-41 to -53 VDC (PS -48 DC 50 model only)

Output Voltages:

24 VDC, $\pm 5\%$ (all models)

Output Power Available:

70 watts (PS 120/240 AC 85-U model)
85 watts (PS 120/240 AC 85 model)
35 watts (PS 120/240 AC 50-U model)
50 watts (PS 120/240 AC 50 and PS -48 DC 50 models)

Overload Protection:

Short circuit protection
Overvoltage protection
Fuse protection on inputs
MOV protection on inputs

MECHANICAL

Operating Environment:

32 to 120°F, (0 to 49°C), 10 to 95%RH (non-condensing)

Size:

9.0"W (228.7mm)
7.2"H (182.88mm) (with mounting clips extended)
6.2"H (157.48mm) (with mounting clips closed)
2.5"D (96.5 x 170.2 x 63.5mm)

Weight:

1.75 lbs (0.79kg)

Enclosure Type:

UL open class, flammability rating of UL94-5V, IP 10

Mounting:

Mount on DIN rail or wall-mount using attached fasteners. Andover Continuum NEMA 1-style enclosure available.

BATTERY

(PS 120/240 AC 50-U and PS 120/240 AC 85-U models only)

Battery Backup:

Battery backup UPS circuit with built-in battery charger provides automatic battery backup UPS power in event of AC line failure. Two 12V 7.0 AHr sealed rechargeable batteries (not included), connected with 5 amp pico fuse, provide a 24 VDC battery source.

Battery Backup Duration:

60 minutes @ 35 watts power consumption full UPS to CPU plus I/O power (PS 120/240 AC-50-U model) and 30 minutes @ 70 watts (PS 120/240 AC-85-U model); 4 hours CPU module only (including modem and network interface) with no I/O; or 72 hours DRAM and real-time clock. Expandable by use of greater amp hour batteries. For example, for a 4-hour full backup time, minimum of 2-12V 28 AHr batteries must be provided.

Battery Charging Time:

48 hours maximum for built-in 15 watt battery charger to fully charge battery from lowest system battery discharge point.

CONNECTIONS

AC Input:

(PS 120/240 AC 50-U, PS 120/240 AC 50, PS 120/240 AC 85, and PS 120/240 AC 85-U models only)
Three-position screw connector

DC Input:

(PS -48 DC 50 model only)
Three-position screw connector

Battery, 24 VDC:

(PS 120/240 AC 50-U and PS 120/240 AC 85-U models only)
Two-position plug-in screw connector

External Power Indicator:

Two-position connector for optional power indicator LED (optional cable assembly available).

USER LEDS/SWITCHES

Status Indicator LEDS

MAIN POWER:

AC (or DC) Power ON/OFF Status Indicator

UPS POWER:

(PS 120/240 AC 50-U and PS 120/240 AC 85-U models only)
UPS Power ON/OFF Status Indicator

SWITCHES

ON/OFF:

Turns AC (or DC) power ON and OFF. Located on top left side of module. Indicated by MAIN POWER LED.

AGENCY LISTINGS

UL/CUL 916, FCC CLASS A, CE
UL 864 (PS 120/240 AC 50-U and PS 120/240 AC 50 only)
UL 294 (PS 120/240 AC 50-U, PS 120/240 AC 50, PS 120/240 AC 85-U, PS 120/240 AC 85 only)
UL1076 (PS 120/240 AC 50-U and PS 120/240 AC 85-U only)

OPTIONS

External Power Indicator LED Cable Assembly—Approximately 2 ft. in length. (P/N: 01-0100-422)

Two 12V 7.0 AHr Sealed Rechargeable Batteries Only (P/N: 01-2100-423)

Battery Bracket & Cable Only (P/N: 01-0010-868)

Two 12V 7.0 AHr Sealed Rechargeable Batteries plus Battery Bracket & Cable (P/N: 01-0010-842)

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05/06



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