

## 1 Overview

The HPS5PM power supply/battery charger converts a low voltage AC input into an output of 12 VDC or 24 VDC @ 4.0A of continuous supply current (refer to Specifications sheet). This access control power supply is power monitored with AC fail and low battery supervision (Form "C" contact relays).

## 2 Specifications

- Dip switch selectable for 12VDC or 24VDC output.
- Provides up to 4.0A of continuous supply current when using appropriate transformer and ventilated enclosure.
- Output is filtered and electronically regulated.
- Built-in charger for sealed lead acid or gell cell type batteries.
- Maximum charge current of 1A.
- If a battery charger is used, subtract 1A from total output to determine allowable load.
- Automatic brown out protection. Instantaneously switches to stand-by battery upon AC fail.
- Battery protected from short circuits.
- Thermal and short circuit protection with auto reset.
- LED indicators for AC input and DC output.
- Compact design (board dimension: 7"L x 4"W x 2.5"H)
- Battery leads and foam mounting tape included.
- AC fail and low battery supervision (Form "C" relay contacts rated @ 5A, 30VDC/120VAC).

## 3 Installation Instructions

1. Mount the HPS5PM in the desired enclosure and location using the supplied tape or user supplied screws. If mounting using screws, use #6 screws and 3/8" non-metallic spacers.
2. The HPS5PM is factory set for 12 VDC, refer to table to switch to 24 VDC output.
3. Disconnect power from branch circuit.
4. Connect the proper transformer to the terminals labeled [AC] (refer to table for correct transformer selection). For increased static discharge immunity, connect earth terminal to electrical ground.
5. Use 18 AWG or larger wire for all power connections. Keep a minimum spacing of 1/4" (6.35cm) between all power limited and non-power limited wiring, such as 115 VAC/60 Hz input and battery wiring. Connect AC fail/battery fail (form "C" terminals) as desired to monitor unit.
6. While carefully observing polarity, connect the devices to be powered to the terminals labeled [+DC-]. To avoid potential damage, it is important to measure and adjust the output voltage prior to connecting any devices.
7. Connect the lead acid or gel type battery using the supplied battery leads to the terminals labeled [+BAT-]. Use two (2) 12 VDC batteries connected in series for 24 volt operation. Recommended charge voltage is 13.8 VDC for one (1) battery and 27.6 VDC for two (2) batteries.
8. After batteries and AC power have been applied, both LEDs will light.
9. It is recommended that the output current be measured to ensure that it does not exceed the rated maximum current for the transformer used (refer to table for transformer selection).

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## 4 Voltage Output and Transformer Selection

Max. Output Rating	Switch Selection	Transformer Requirements	Honeywell Transformer Model:
12VDC @ 2.0A	OFF	16VAC/40VA	HPT1640
12VDC @ 2.0A	OFF	24VAC/50VA	HPT2450
13.8VDC @ 4.0A	OFF	28VAC/100VA	HPT28100
13.8VDC @ 4.0A	ON	28VAC/175VA	HPT28175
27.6VDC @ 2.0A	ON	28VAC/100VA	HPT28100
27.6VDC @ 3.5A	ON	28VAC/175VA	HPT28175

## 5 LED Operations

Red (DC)	Green (AC)	Power Supply Status
ON	ON	Normal operating condition.
ON	OFF	Low AC, stand-by battery (if present and charged) supplying power/AC fail relay engaged.
OFF	ON	No Dc output. Short circuit or thermal overload condition.
OFF	OFF	No DC output. Low AC voltage. Discharged or no battery present.

## 6 Terminal Identification

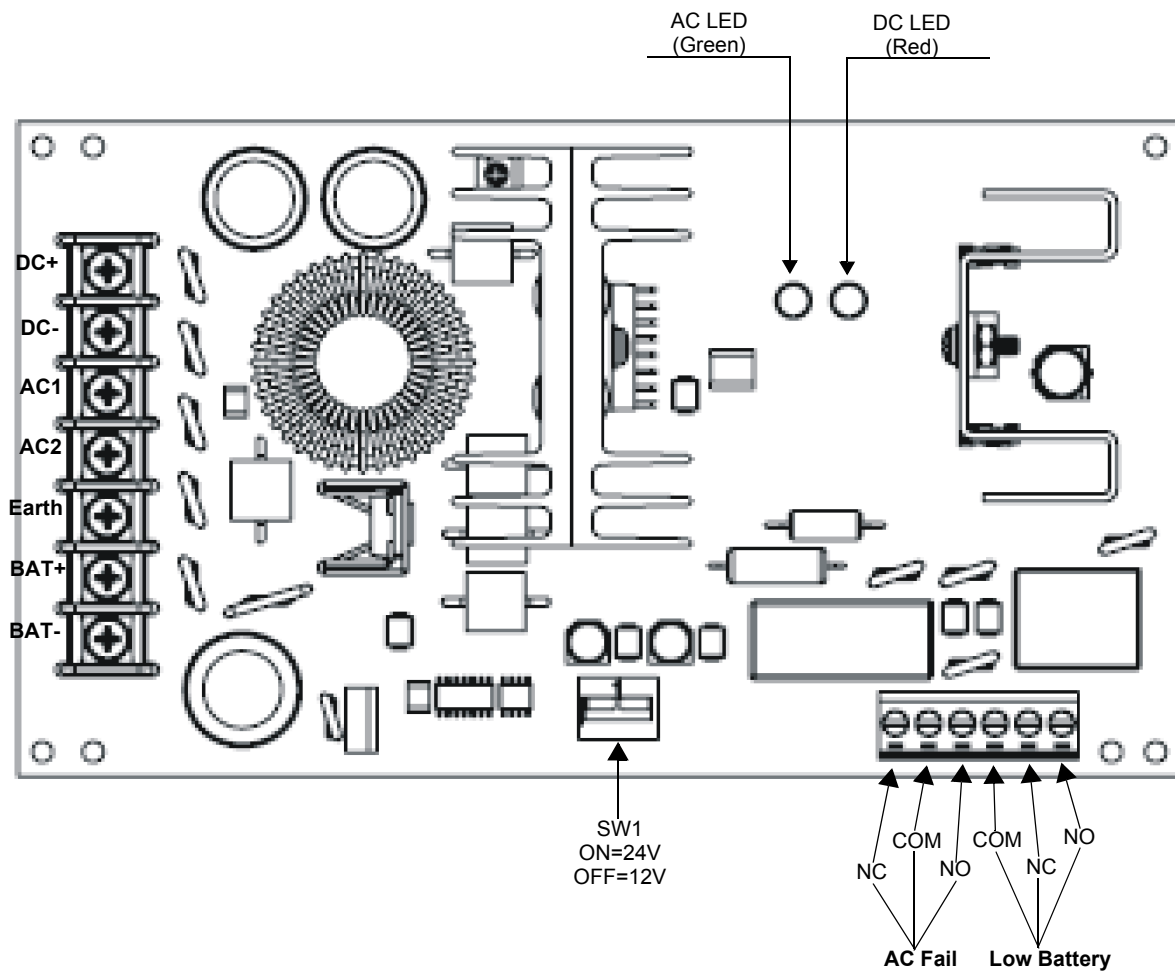
Terminal Label	Function Description
-DC+	12VDC or 24VDC @ 4.0A total continuous supply current output.
+BAT-	Stand-by battery connections. Maximum charge rate 1A.
AC AC	Low voltage AC input (refer to Voltage Output and Transformer Selection table).
EARTH	For increased static discharge immunity connect to electrical ground.



### **WARNING: Risk of injury and/or equipment damage!**

For continuous protection against hazard, replace fuses only with exact type and rating. A readily accessible switched circuit breaker must be available to disconnect main power as required. Installation and servicing should only be made by qualified personnel; contains no user-serviceable parts. Install in accordance with all local regulations and the National Electrical Code.

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For additional information:

- Visit our website at <http://www.honeywellpower.com>
- Contact Technical Support at 1(877) HPP-POWR
- E-mail us at [hpp.techserv@honeywell.com](mailto:hpp.techserv@honeywell.com)