

1 Overview

The HPS3PM power supply/battery charger converts a low voltage AC input into an output of 12 VDC or 24 VDC @ 3.5 amps 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 12 VDC or 24 VDC output.
- Provides up to 3.5 amps 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 gel type batteries.
- Maximum charge current of 400 mA. If battery charger is used, subtract 400 mA 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 overload protection with auto reset.
- LED indicators for AC input and DC output.
- Compact design (board dimensions: 7"L x 4"W x 1.75"H)
- Battery leads and foam mounting tape included.
- AC fail and low battery supervision (Form "C" relay contacts rated @ 5 amps, 30 VDC/120 VAC).
- Temperature Range: 32°F to 120°F (0°C to 49°C)

3 Installation Instructions

The HPS3PM should be installed in accordance with the national Electric Code and local authority having jurisdiction.

1. Mount the HPS3PM 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 HPS3PM 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 .25" (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

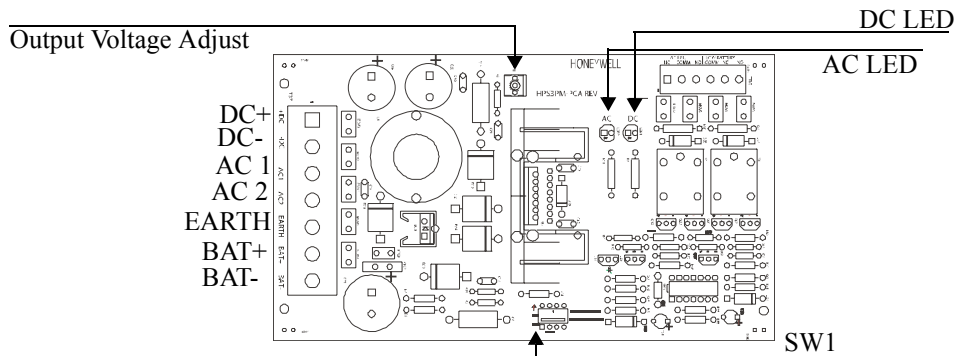
Maximum Output Rating	Switch Selection	Transformer Requirements	Honeywell Transformer Model
12 VDC @ 2.5 A	OFF	16 VAC/40 VA	HPT1640
13.8 VDC @ 2.5 A	OFF	24 VAC/50 VA	HPT2450
13.8 VDC @ 3.0 A	OFF	28 VAC/100 VA	HPT28100
13.8 VDC @ 3.5 A	OFF	28 VAC/175 VA	HPT28175
27.6 VDC @ 3.0 A	ON	28 VAC/100 VA	HPT28100
27.6 VDC @ 3.5 A	ON	28 VAC/175 VA	HPT28175

Important Note: Transformers with higher power (VA) ratings may be used for all output voltages providing the input voltage doesn't exceed 28VAC and the power supply is operating within its maximum rated output load as stated above.



WARNING: To reduce risk of electric shock, do not expose unit to rain or excess moisture.

Disconnect power before servicing unit. 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. All 120V wiring should be routed so that it cannot touch 24V wiring; minimum spacing 3/8" (0.953cm). 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.



5 LED Indicators

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+	12 VDC or 24 VDC @ 3.5 A total continuous supply current output.
+BAT-	Stand-by battery connections. Maximum charge rate 400 mA.
AC AC	Low voltage AC input (refer to Voltage Output/Transformer Selection Table).
EARTH	For increased static discharge immunity connect to electrical ground.

For additional information:

- Visit our website at <http://www.honeywellpower.com>
- Contact Technical Support at 1(877) HPP-POWER
- E-mail us at hpp_techserv@honeywell.com