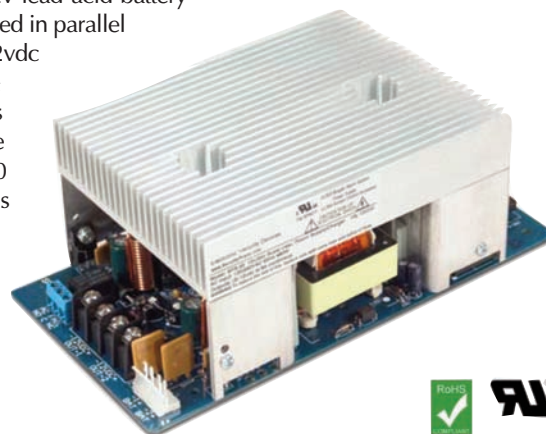


# PS8/24PB Supervised Power Supply/Charger

## ACCESSORIES

The PS8/24PB supervised power supply with battery chargers are two fully isolated independent 12v 10A power supplies enclosed in one small self contained aluminum package. Each power supply, outputs 1 and 2, are a nominal 12vdc at 10 Amps with a 12v lead acid battery charger. These isolated outputs can be connected in parallel or series to provide 12vdc, 24vdc or both 12vdc and 24vdc at the same time. When outputs 1 & 2 are connected in parallel, the output is 13.65vdc at 20 Amps. When outputs 1 & 2 are connected in series, the output is 27.3vdc at 10 Amps. Because each output is independent, This allows you to use 12vdc and 24vdc at the same time. The 12v current used has to be subtracted from the 8 Amp rating available on the 24vdc. Charging two 12v batteries independently is also a very big benefit for long battery life.



### Features

- Two 12vdc 10A (8Amp rated) Outputs that can be connected in Parallel or Series to provide 12vdc, 24vdc, or 12vdc & 24vdc
- Outputs 1 and 2 are fully isolated, Independent Power Supplies
- Efficient Off-Line Switching Power Supply Self Contained, No External Transformer required
- 120/240VAC Selectable AC input
- Extraordinary Brown Out Capability
- Precise Battery Regulation for Lead Acid Batteries
- LED's Indicate AC and DC Outputs 1 & 2
- Relay Contacts Indicates AC Power Status
- Battery Online, No Drop or Switch Over with AC Power Fail
- Auto Resetting circuit breaker for battery(s)
- Over Current Protection with Reverse battery protection
- Electronic Power Limited and Short Circuit Protection on each output
- Each output has Thermal shut down with auto restart
- UL Recognized component for Access Control & Burglar Alarm

### Specifications/Instructions

#### AC Input: L, N, G - 3P Terminal block

Safety Cover, snap or hinge is provided  
 L= Line, N= Neutral, and G = Ground  
 The G terminal must be connected to Earth Ground.  
 Optional 3 wire line cord P/N: .....HALC3SZIP  
 AC input/Hz/Watts default . . . .90-132vac/47-63Hz/400w  
 AC input/Hz/Watts (set 240) . .133-250vac/47-63Hz/400w  
**Caution:** Never apply 240vac when PS8/24PB is set for 120vac this will void warrantee and damage unit.  
 The AC input default is 120vac.

#### AC LED Indicator (Next to AC Input Terminal Strip)

The AC indicator is a bi-color green and red led.

#### AC Line Fuse

Fuse: .....5 x 20mm 8A 250v fast  
 AC Status Output Relay: 3P Terminal block  
 AC fail "C" contacts .....2A/120vac  
 Three position AC fail terminal block marked "NO, C, NC" are shown in the Normal, energized, AC ON condition.

#### DC OUTPUTS: 4P Terminal block (2 per output)

Output-1 & 2 continuous rating .....12vdc at 8A ea  
 Output 1 & 2 Typical Output Voltage .....13.65vdc  
 Load regulation no load to max .....25%Typ  
 AC Line regulation 85-136vac/170-264vac . . .03%Typ  
 Each Output ripple & noise at full load . . . .400mv pp  
 Current Overload Short Circuit Protection .....Yes  
 Thermal Shut down will auto-restart .....Yes  
 Switching Frequency .....66KHz  
 DC LED Indicator (Adjacent to each output pair) . .Red  
**Battery Charging (Header plugs marked [-Bat+])**

The PS8/24PB has 2 12v battery chargers that are precisely set to charge sealed gel, AGM or wet lead acid batteries. Two 12" battery cable assemblies are provided Red (+) & Black (-)

Battery(s), any type of lead acid .....12v 4AH-100AH  
 Battery(s) 1 & 2 discharge PTC self resetting .....8A  
 Battery(s) 1 & 2 Reverse hookup protection .....Yes

In standby mode each battery is limited to 8 Amps of continuous current. When both outputs are connected in parallel, and standby current will be greater than 8 Amps, you must use 2 batteries connecting one to battery 1 and one to battery 2.

To estimate the recharge time in hours for depleted battery(s), multiply the AH rating times 1.2. (AH x 1.2). As an example, 2 12v 10AH batteries would take about 12 hours to re-charge.

#### Environmental:

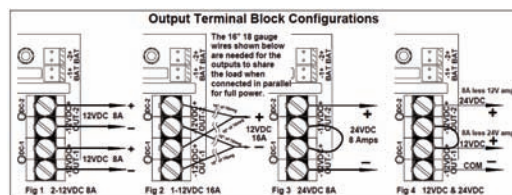
Humidity .....95% RH Non Condensing  
 Ts Storage Temperature .....-40°C – 85°C  
 Ot Operating Temperature Range 100% rating:  
 Ot Power module only .....-20 – 44°C  
 Ot with E-1414 Enclosure on wall .....-20 – 33°C  
 each 3% load reduction increases Ot by .....+1°C  
 Over temp shut down Mosfet Jt Temp .....150°C

#### Mechanical Characteristics:

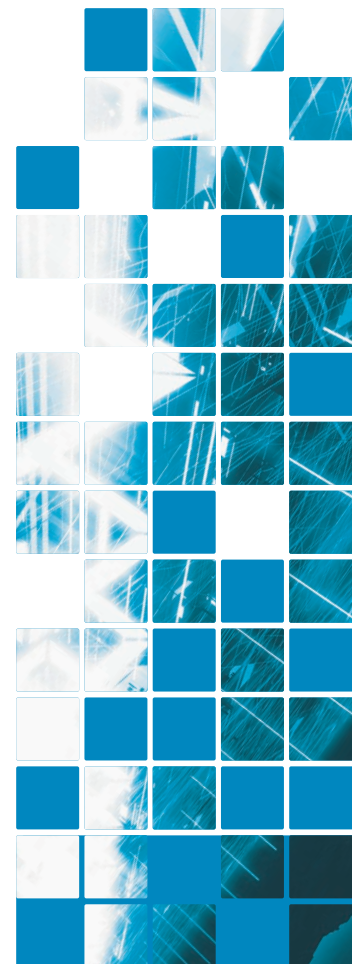
PS8/24PB Module Dimensions: 7.75"L x 4.17"W x 3.23"H  
 Height includes 7/16" standoffs  
 Mounting Holes Center to Center . . . .6.45"W x 3.41"H

#### Approvals:

PS8/24PB meets requirements of UL1950 3rd & EN60950  
 PS8/24PB is UL R/C .....UL603, UL294  
 RoHS Lead Free



Do not make series or parallel connections at the batteries, before circuit breaker protection, just at the output as shown above. Paralleling jumpers in Fig 2 must be 12" of 18 awg wires to add a little resistance so both outputs can share the load.



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