

LP-1 6/12/24vdc Selectable @ 1A Linear Power Supply Charger module

LP-1EST12 mounted in a 8"x 9" Enclosure with 16vac 50va Class II plug in Transformer

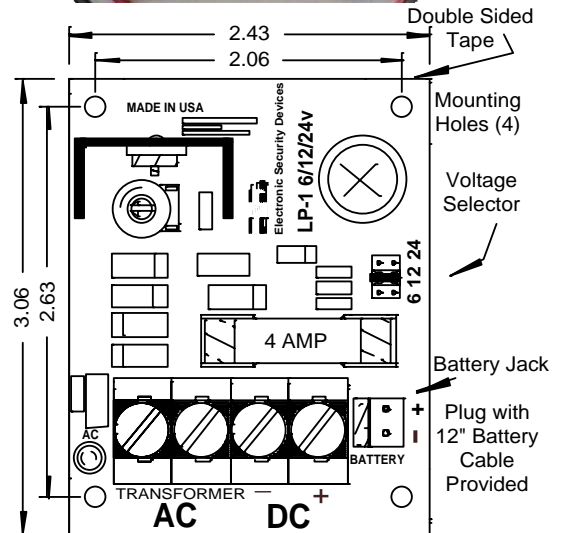
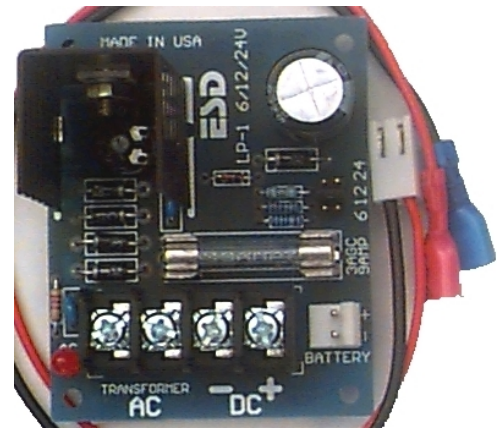
LP-1EST24 mounted in a 8"x 9" Enclosure with 24vac 50va Class II plug in Transformer

LP-1T12 Module with 16vac 50va Class II plug in Transformer

LP-1T24 Module with 24vac 50va plug in Class II Transformer

Features:

- **Selectable Output & Battery Charging 6/12/24 VDC**
- **1 Amp Continuous Supply Current**
- **Battery Charge Rate is Electronically Temperature Compensated**
- **Clean Linear Output**
- **Electronically Protected against Over Current and Temperature**
- **Fused Battery Protection with optional Auto Re-setting Circuit Breaker**
- **Precise Output Regulation for Battery Charging**
- **12" Battery Leads with Protected Plug and Jack**
- **Surge Protected**
- **Self-Clamping Terminal Screws**
- **Small Size 3.06"H x 2.43"W x 2"D**
- **Quality Manufactured in the USA with a Life Time Warranty**



Discription

The LP-1 becomes an uninterruptable power supply when used with a transformer and stand by battery. The output of the LP-1 is a clean smooth continuous DC power which can be used to power the most sensitive electronic controls.

The LP-1 output and battery charge voltage is selected by moving the programming jumper to 6V, 12V or 24V. The voltage selected is factory preset to precisely charge a Sealed, flooded, or Gel Type Lead Acid Battery(s).

The current that the battery draws from the LP-1 is determined by the battery's condition, capacity, temperature and state of charge. The LP-1 is protected against shorts and overloading with its electronic circuitry and battery fuse. This same circuitry also protects the transformer. When the DC

load requires more than the maximum output provided by the LP-1, the battery can add up to 4 more amps.

This may be necessary to sound a high powered siren for the duration of an alarm. The LP-1 has a replaceable 4 amp battery fuse or optional automatic resetting 2 Amp circuit breaker.

For calculating standby current, recharge times, and available current, refer to the tables and the specifications on the backside of this bulletin.

To test the battery and fuse: It is recommended that on a regular basis, the output should be checked for proper voltage and current while the AC power is removed.



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03/26/08 © Technical Literature job LP-1 specifications subject to change
products\lp-1\LP1TechSales.doc

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LP-1 Power Supply/Charger Continued

Specifications

Output DC Voltages are optimized for Sealed Lead Acid or Gel Type Battery Charging.

Caution: Select your output voltage before connecting AC.

6V Selection 6.70vdc
 12V Selection 13.65vdc
 24V Selection 27.30vdc

Output Current Note: If you are using a standby battery, subtract at least 150ma from your continuous current for charging the battery. This allows up to 850ma of continuous current for your output load. See transformer selection table below.

Maximum Output Current of Supply 1.5A
 Thermal Shutdown 82C
 Humidity 95% RH Non Condensing
 Ts Storage Temperature -40°C – 85°C
 Ot Operating Temperature Range 100% rating:
 Ot Power module only -20 – 40°C

Ot with E-89 Enclosure on wall -20 – 30°C
 Each 3% load reduction increases Ot by +1°C
 Intermittent Current with Battery 5.5 Amps
 Maximum Battery Current with 3AGC 4 Amp Standard Fuse 4 Amps
 Maximum Battery Current with Optional Auto Resetting Circuit Breaker 2 Amps
 Typical Regulation from No Load to Full Rated Current05%
 Typical Ripple and Noise @ Full Load 50mv
 Voltage Change after 1 year of Continuous Operation (Long Term Stability)02VDC
 Center-to-Center Terminal Block Spacing with Self Clamping Screws375"
 Module Size 3.06"H x 2.43"W x 2"D
 Module mounting holes C-to-C 2 1/16"W x 2 5/8"H
 Small Enclosure size 8"W x 9"H x 3.5"D
 RoHS Lead Free



Input AC Transformer Selection Table:

Transformer/ min. VA	Selected DC Output Voltage	Continuous Current
12 vac@20VA	6vdc	1 Amp
16vac@20VA	12vdc	1 Amp
25-28vac@40VA	24vdc	1 Amp
24vac@40VA	6vdc	.20 Amp
24vac@40VA	12vdc	.25 Amp
24vac@40VA	24vdc	.60 Amp

Battery Standby and Recharge Time Table

Recharge times shown on table are to 90% of Battery capacity. The last 10% of charge takes approximately 5 Hours.

Output Current Draw	4 Amp Hr Battery Standby	4 Amp Hr Recharge Time	7 Amp Hr Battery Standby	7 Amp Hr Recharge Time	20 Amp Hr Battery Standby	20 Amp Hr Recharge Time
100mA	48 Hours	6 Hours	90 Hours	11 Hours	240 Hours	30 Hours
300mA	12 Hours	7 Hours	26 Hours	13 Hours	74 Hours	37 Hours
500mA	6.5 Hours	10 Hours	13 Hours	17 Hours	50 Hours	42 Hours
600mA	6.5 Hours	11 Hours	19 Hours	19 Hours	43 Hours	50 Hours
700mA	4.2 Hours	13 Hours	9.4 Hours	23 Hours	N/A	N/A
800mA	4.2 Hours	17 Hours	8 Hours	29 Hours	N/A	N/A
850mA	3.8 Hours	22 Hours	6.5 Hours	39 Hours	N/A	N/A