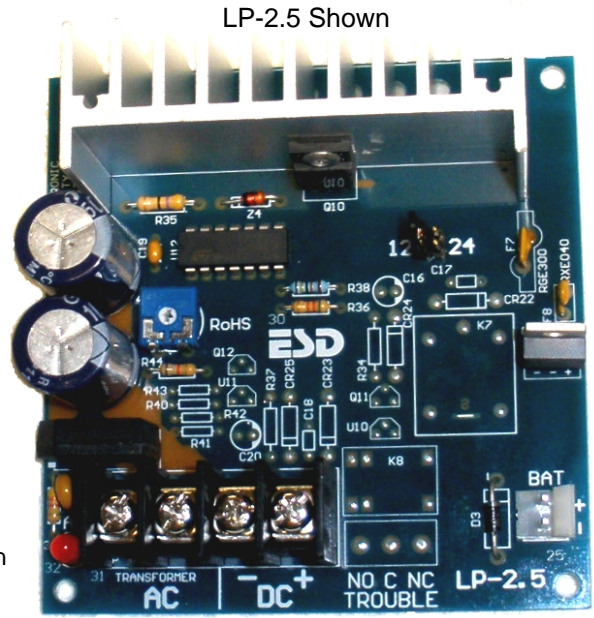


- LP-2.5 12/24Vdc @ 2.5A Linear Power Supply Charger module
- LP(S)-2.5 12/24Vdc @ 2.5A Supervised Power Supply Charger module (S) may be added to any configuration
- LP-5 12/24Vdc @ 4A Two LP-2.5's connected together
- LP-2.5EST12 mounted in a 8"x 9" Enclosure with UL 16vac 50VA Class II plug in Transformer
- LP-2.5EST24 mounted in a 8"x 9" Enclosure with UL 24Vac 50va Class II plug in Transformer
- LP-2.5T12 Module with UL 16Vac 50VA plug in Class II plug in Transformer
- LP-2.5T24 Module with UL 24Vac 50VA plug in Class II plug in Transformer
- LP-2.5EX12D4 mounted in a 14"x8" Enclosure with UL 16Vac 56VA open frame transformer and 4 fused outputs
- LP-2.4EX24D4 mounted in a 14"x8" Enclosure with 24Vac 100VA

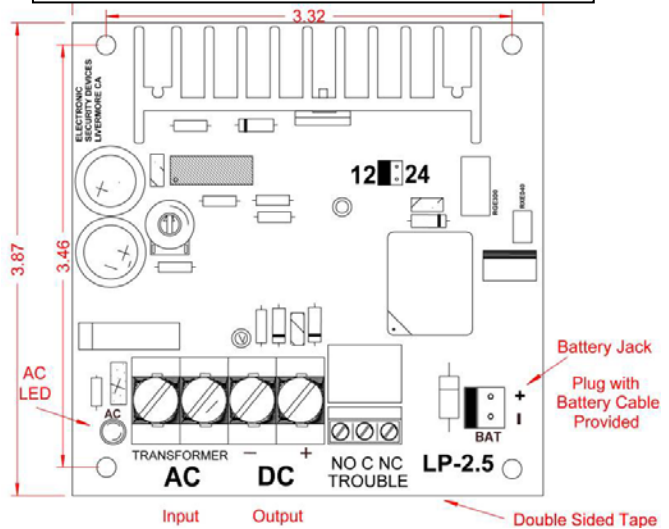
**Features LP-2 & LPS-2:**

- 12/24vdc @ 2.5A Jumper Selectable
- Units may be Paralleled to Double Output Current (LP-5)
- PTC Circuit Breakers protect Battery and Output
- Reversed Battery Protected
- Electronic current limiting
- Precise Output Regulation for Charging Sealed Lead Acid or Gel Type Batteries
- Battery Online, No Switch Over with AC Power Fail
- Input and Output are Surge Protected
- Power LED Indicator
- Wire Ready Self Clamping Terminal Screws
- 18" Battery Leads provided with Quick Plug
- Quality Manufactured in the USA with a Limited Life Time Warranty

LPS-2.5 Shown



Note: Use appropriate mounting hardware  
Heat sink is HOT with VOLTAGE



**LPS-2 Supervised Features:**

- Trouble Relay "C" Contacts Indicates Low Battery and AC Power Fail
- Battery Cut-Off Relay Disconnects Battery(s) when Depleted, Preventing Deep Discharge

**Description**

The LP(S)-2.5 becomes an uninterruptible 12 or 24Vdc 2.5 Amp DC power supply when used with an appropriate transformer and lead acid stand by battery. These power supplies are commercial units designed to run security equipment 24 hours a day every day. The output is clean, continuous, linear DC that can be used to power the most sensitive security devices. These units can be paralleled to double output current. Selecting 12v or 24v with the 12/24 programming jumper sets the DC output, battery charge voltage and

trip points for the supervisory relays. The battery charger will precisely charge a Sealed, Gel, or wet Lead Acid Battery. The maximum charge current to the Battery(s) is limited to a maximum of 200ma to provide the maximum DC output when using a plug in transformer. The DC output is protected against shorts and overloading with its electronic circuitry and DC output auto resetting 3A PTC circuit breaker. Because the LP(S)-2.5 can use all of the available power of a 50VA transformer it is **important that when using a plug in transformer to use one with an auto**

-03/01/10 © Technical Literature jdb LP(S)-2.5 specifications subject to change  
lproducts\lp2.5techsales.doc



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## LP-2.5/LPS-2.5 Sales / Instructions Continued

resetting circuit breaker instead of a fixed non replaceable fuse. See ratings details in the specifications below.

Unlike the LP(S)-2, that uses a fuse for the Battery, the LP(S)-2.5 can not be used to power high inrush current devices that draw more than 3 Amps such as crash bar

exit devices. To test the standby battery It is recommended that on a regular basis, the output should be checked for proper voltage and current while the AC power is disconnected.

### Specifications / Instructions

#### Input AC Transformer

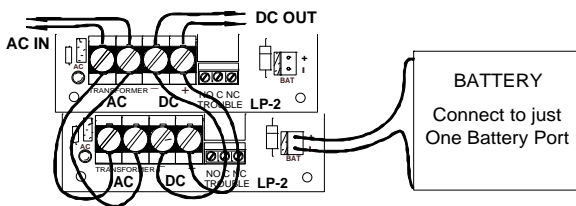
Terminals 1 & 2 identified by ..... AC  
 Maximum Voltage ..... 28Vac  
 12vdc at 2.5A DC Output requires ..... 16Vac at 56VA  
 12Vdc at 2.20A DC Output requires..... 16Vac at 50VA  
 12Vdc at 1.75A DC Output requires ..... 16Vac at 40VA  
 24Vdc at 2.5A DC Output requires ..... 24Vac at 76VA  
 24vdc at 1.4A DC Output requires ..... 24vac at 50VA  
 Note: When selected for 12vdc output and using a 24vac transformer, limit the output current to less than 900ma. to avoid overheating power supply.

**AC LED Indicator** ..... Red LED  
**DC Output Voltage Selector** ..... 12/24 Jumper  
**CAUTION** Select voltage before any connections are made.

#### DC OUTPUT

Terminal 3 & 4 identified by ..... DC  
 DC Output voltage Nominal ..... 12Vdc/24Vdc  
 Output voltage Typical ..... 13.65Vdc/27.30Vdc  
 With proper transformer  
 DC Output Current continuous rating ..... 2A  
 DC Output Maximum ..... 3A  
 Battery Charge maximum limited ..... 200ma  
 Maximum Output holding current ..... 3A  
 Ripple @ 80% load ..... 30mv pp Typ  
 Short circuit current limiting ..... Yes  
 Reverse battery hook up protection ..... Yes  
 1 year long term Stability ..... .03VDC

#### Paralleling Units for more power



Daisy chain each pin together. Pin 1 to 1, 2 to 2, 3 to 3 and pin 4 to 4. It is very important to keep the polarity of the pins the same. Use just one battery port connection and trouble relay if applicable. The VA rating for the Transformer must be at least doubled.

#### LPS-2.5 Supervised Functions Trbl & Bat Disconnect:

**Trouble Output:** 3P Terminal block - annunciates low battery & AC Fail "C" contacts rating ..... 2A/120vac  
 Trouble Trip Point ..... 12.2/24.4vdc  
 Three position trouble terminal block is marked "NO, C, NC" are shown in the Normal, energized, no trouble condition.

#### Battery Disconnect

Battery Disconnect Voltage ..... 9.9vdc/19.8vdc  
 Battery Cutoff Relay is normally energized for fail-safe operation.

#### Battery Charging: (Header plug marked [-Bat+])

The battery charger is precision set to float charge 12V or 24V Sealed, Gel or wet lead acid batteries. Two 12V batteries are connected in series for 24V. A 15" battery cable assembly is provided to connect the module to a battery. Red (+) 12vdc, Black (-) Neg.

Optional 12" cable assembly for connecting two 12v batteries in series for 24volts ..... 24SW  
 Optional 36" battery cable (1) P/N: ..... WA-36IBAT  
 Amp Hour capacity range ..... 4AH-100AH  
 The recharge Amp Rate ..... 100ma  
 Hours to recharge = Bat AH capacity /Amp Rate  
 To select battery(s), see standby selection table [www.securitypower.com/an3batby.pdf](http://www.securitypower.com/an3batby.pdf) .

#### Environmental:

Humidity ..... 95% RH Non Condensing  
 Ts Storage Temperature ..... -40°C – 85°C  
 Ot Operating Temperature Range 100% rating:  
 Ot module only ..... -20°C – 36°C  
 Ot mounted in Enclosure ..... -20°C – 26°C  
 Each 1.4% load reduction increases Ot by: ..... 1°C

#### Mechanical Characteristics:

Center-to-Center Terminal Block Spacing with Wire ready self Clamping Screws ..... .375"  
 Module Size ..... 3 3/4"H x 3 11/16"W x 1 5/8"D  
 Mounting Holes Center-to-Center ..... 3 5/16" W x 3 7/16"H  
 "ES" Enclosure size ..... 8"W x 9"H x 3.5"D  
 "E" Enclosure size ..... 14"W x 9"H x 3.5"D  
 LPS-2.5 module ..... 3.2oz  
 8x9 Enclosure ..... 3.8lbs  
 100va Transformer ..... 2.8lbs  
 50va Plug in Transformer ..... 1.7lbs

#### Safety

LP-2.5/LPS-2.5 meets safety ..... UL1950 & EN60950  
 Lead Free RoHs compliant

