

## DPS3 - Power Supply/Charger

Rev. 042803

#### Overview:

DPS3 power supply/charger converts low voltage AC input into 6VDC, 12VDC or 24VDC @ 2.5 amp of continuous supply current (see specifications). This general purpose power supply has a wide range of applications for access control, security and CCTV system accessories that require additional power.

#### Specifications:

- Switch selectable 6VDC-12VDC-24VDC.
- 2.5 amp continuous supply current at 6VDC-12VDC-24VDC\*.
- Filtered and electronically regulated output.
- Built-in charger for sealed lead acid or gel type batteries.
- Maximum charge current 350mA.
- Automatic switch over to stand-by battery.
- Battery short circuit protection (circuit breaker).
- Thermal overload and short circuit protection.
- AC input and DC output LED indicators.
- Extremely compact design.
- Includes Snap Trac (Altronix model #ST3) and battery leads.

Board Dimensions: 3.5"L x 3"W x 2"H



#### Voltage Output/Transformer Selection Table:

Output Voltage	Switch Position		Transformer Requirements
	1	2	(Recommended Altronix Part #'s)
6VDC	ON	OFF	16VAC / 40VA (TP1640)
12VDC	OFF	OFF	16VAC / 40VA (TP1640, T24130 or T2885)
24VDC	OFF	ON	28VAC / 100VA (T2885)

**Note:** Transformers with higher VA ratings may be used for all output voltages above as long as you do not exceed 28VAC or 45VDC.

#### Installation Instructions:

The DPS3 should be installed in accordance with The National Electrical Code and all applicable Local Regulations.

- 1. Mount the DPS3 in desired location.
- 2. Set DC output voltage with switches (refer to Voltage Output/Transformer Selection Table).
- 3. Connect proper transformer to terminals marked [AC] (*Voltage Output/Transformer Selection Table*). Use 18 AWG or larger for all power connections (Battery, DC output).

Keep power limited wiring separate from non-power limited wiring (115VAC / 60Hz Input, Battery Wires). Minimum .25" spacing must be provided.

- 4. Measure output voltage before connecting devices. This helps avoid potential damage.
- 5. Connect devices to be powered to terminals marked [+DC -].
- 6. When the use of stand-by batteries are desired, they must be lead acid or gel type.

Connect battery to terminals marked [+ BAT -] (battery leads included).

Use two (2) 12VDC batteries connected in series for 24VDC operation.

**Note:** When batteries are not used a loss of AC will result in the loss of output voltage.

#### LED Diagnostics:

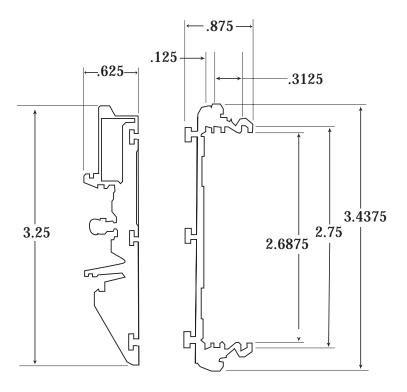
Red (DC)	Green (AC)	Power Supply Status
ON	ON	Normal operating condition.
ON	OFF	Loss of AC, Stand-by battery supplying power.
OFF	ON	No DC output. Short circuit or thermal overload condition.
OFF	OFF	No DC output. Loss of AC. Discharged or no battery present.

<sup>\*</sup> Specified at 25° C ambient.

## DPS3 - Board Drawing:

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## ST3 Drawing:



#### Terminal Identification:

Terminal Legend	Function/Description
AC/AC	Low voltage AC input (Voltage Output/Transformer Selection Table).  For 6VDC output use 16VAC or higher with 24VA power rating or higher.  For 12VDC output use 16VAC or higher with 40VA power rating or higher.  For 24VDC output use 28VAC with 85VA power rating or higher.  Caution: Do not apply voltages above 28VAC (28VAC is maximum input rating)
- DC +	6VDC-12VDC-24VDC @ 2.5 amp continuous power limited output.
+ BAT -	Stand-by battery connections. Maximum charge rate 350mA.