



DPS3 Power Supply/Charger

Installation Guide

Overview:

DPS3 power supply/charger converts low voltage AC input into 6VDC, 12VDC or 24VDC @ 2.5A 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:

Input:

- 6VDC or 12VDC output - use TP1640;
- 24VDC output - use T2428100.

Output:

- 6VDC, 12VDC or 24VDC selectable output.
- 2.5A continuous supply current.
- Filtered and electronically regulated output.
- Short circuit and thermal overload protection.

Battery Backup:

- Built-in charger for sealed lead acid or gel type batteries.
- Automatic switch over to stand-by battery when AC fails.

Battery Backup (cont'd):

- Maximum charge current 0.35A.
- Battery short circuit protection (circuit breaker).

Visual Indicators:

- AC input and DC output LED indicators.

Features:

- Extremely compact design.
- Includes Snap Track ST3 and clips.
- Includes battery leads.

Board Dimensions (L x W x H approx.):

3.5" x 3" x 2" (88.9mm x 76.2mm x 50.8mm).

Voltage Output/Transformer Selection Table:

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

Installation Instructions:

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

1. Mount DPS3 using included ST3 snap track and clips:
 - Slide the board into the outermost slots on the ST3 (Fig. 2, pg. 2);
 - Attach the clips to the back of ST3 using provided guides and slots;
 - Mount the DPS3 onto the DIN rail using the clips (Fig. 2, pg. 2).
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 (AC Input, Battery Wires).

Minimum 0.25" spacing must be provided.

4. Measure output voltage before connecting devices. This helps avoiding potential damage.
5. Connect devices to be powered to terminals marked [+ DC -] (Fig. 1, pg. 2).
6. When the use of stand-by batteries is desired, they must be lead acid or gel type. Connect battery to the terminals marked [+ BAT -] (battery leads included) (Fig. 1, pg. 2). 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.

Fig. 1 - DPS3

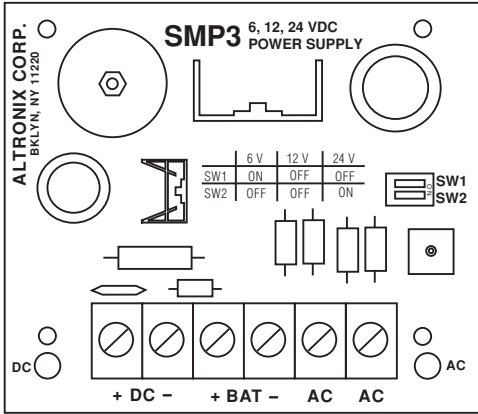
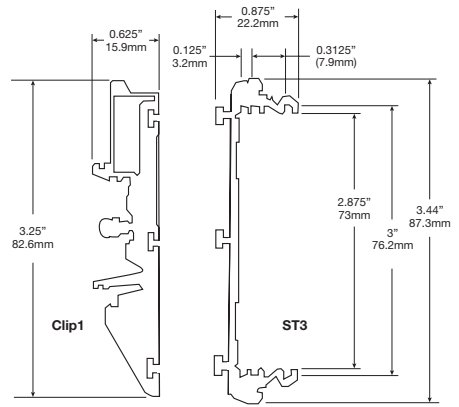


Fig. 2 - ST3



LED Diagnostics:

Red (DC)	Green (AC)	Power Supply Status
ON	ON	Normal operating condition.
ON	OFF	Loss of AC. Stand-by battery is 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.

Terminal Identification:

Terminal Legend	Function/Description
AC/AC	Low voltage AC input (<i>Voltage Output/Transformer Selection Table</i>). 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 @ 2.5A continuous power-limited output.
+ BAT -	Stand-by battery connections. Maximum charge rate 350mA.