



SMP3 - Power Supply/Charger

Overview:

SMP3 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:

Input:

- 16VAC to 28VAC (see transformer selection table).

Output:

- 6VDC, 12VDC or 24VDC selectable output.
- Thermal overload and short circuit protection.
- 2.5 amp continuous supply current*.
- Filtered and electronically regulated output.

Battery Backup:

- Built-in charger for sealed lead acid or gel type batteries.
- Maximum charge current 300mA.
- Automatic switch over to stand-by battery.
- Battery short circuit protection (circuit breaker).

Additional Features:

- AC input and DC output LED indicators.
- Extremely compact design.
- Includes battery leads.
- Snap Track compatible (order Altronix model #ST3).
- DIN Rail Mount version available (order Altronix model #DPS3).

Board Dimensions (W x L x H approximate):

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

* Specified at 25° C ambient.

Voltage Output/Transformer Selection Table:

Output Voltage	Switch Position		Transformer Requirements (Recommended Altronix Part #'s)
	SW1	SW2	
6VDC	Closed (ON)	Open (OFF)	16VAC / 40VA (TP1640)
12VDC	Open (OFF)	Open (OFF)	16VAC / 40VA (TP1640), 24VAC or 28VAC / 100VA (T2428100)
24VDC	Open (OFF)	Closed (ON)	28VAC / 100VA (T2428100)

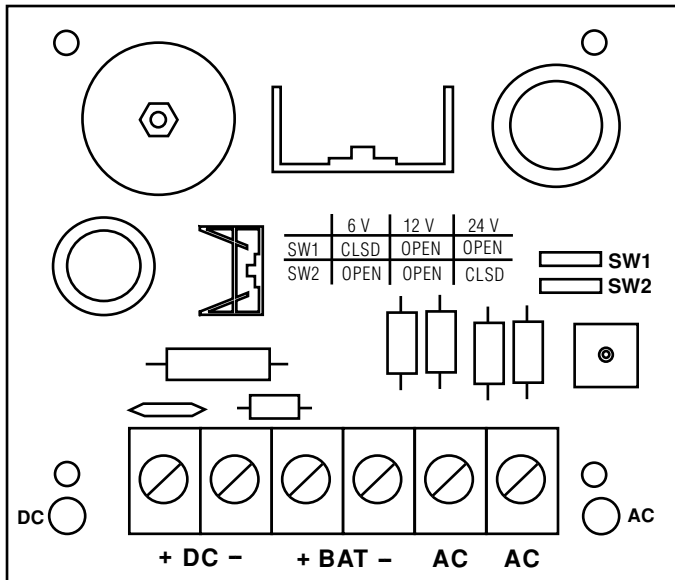
Note: Transformers with higher power (VA) ratings may be used for all output voltages selected above provided the input voltage does not exceed 28VAC or 45VDC.

Installation Instructions:

The SMP3 should be installed in accordance with The National Electrical Code and all applicable Local Regulations.

1. Mount the SMP3 in the desired location / enclosure.
2. Set DC output voltage with switches (refer to Voltage Output/Transformer Selection Table).
3. Connect proper transformer to the terminals marked [AC] (refer to Voltage Output/Transformer Selection Table).
Use 18 AWG or larger for all power connections (Battery, DC output).
4. Measure output voltage before connecting devices. This helps avoiding potential damage.
5. Connect devices to be powered to the terminals marked [+ DC -].
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).
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.

Terminal Identification:

Terminal Legend	Function/Description
AC/AC	Low voltage AC input (see 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 voltage above 28VAC or 45VDC (maximum input rating).
+ DC -	6VDC, 12VDC or 24VDC @ 2.5 amp continuous supply current.
+ BAT -	Stand-by battery connections. Maximum charge rate 350mA.