



SMP5E

High Current Power Supply/Charger Kit

Overview:

Altronix SMP5E High Current Power Supply/Charger converts a low voltage AC input to a low voltage DC output. 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
(*Voltage Output/Transformer Selection Table*).

Output:

- 6VDC, 12VDC or 24VDC selectable output.
- 4A continuous supply current*.
- Thermal overload and short circuit protection.
- 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 (PTC).

Additional Features:

- AC input and DC output LED indicators.
- Extremely compact design.
- Includes battery leads, nylon fastener and enclosure.

Board Dimensions (W x L x H approximate):

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

Enclosure Dimensions (H x W x D approximate):

8.5" x 7.5" x 3.5" (215.9mm x 190.5mm x 88.9mm).

- Fits one (1) 12VDC/7AH or two (2) 12VDC/4AH batteries.

Voltage Output/Transformer Selection Table:

Output Voltage	Switch Position		Transformer Requirements (Recommended Altronix Part #'s)
	SW1	SW2	
6VDC	ON	OFF	16VAC / 40VA (TP1640)
12VDC	OFF	OFF	24VAC or 28VAC / 100VA (T2428100), or 16VAC / 100 VA (T16100)
24VDC	OFF	ON	28VAC / 175VA (T2428175)

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 SMP5E should be installed in accordance with The National Electrical Code and all applicable Local Regulations.

1. Mount the SMP5 board in enclosure (as shown on reverse).
2. Set DC output voltage with switches (refer to *Voltage Output/Transformer Selection Table*).
3. Connect proper transformer to terminals marked [AC] (see *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 0.25" 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 conditions
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 40VA power rating or higher. For 12VDC output use 16VAC or higher with 85VA power rating or higher. For 24VDC output use 28VAC with 175VA power rating or higher. Caution: Do not apply voltage above 28 VAC or 45VDC (maximum input rating).
+ DC –	6VDC, 12VDC or 24VDC @ 4A continuous output
+ BAT –	Stand-by battery connections. Maximum charge rate 300mA.

Enclosure Dimensions (H x W x D approximate):

8.5" x 7.5" x 3.5" (215.9mm x 190.5mm x 88.9mm)

