## **Installation Guide**

#### **Overview:**

Altronix SMP5 power supply/charger converts low voltage AC input into 6VDC, 12VDC or 24VDC @ 4A 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 (Voltage Output/Transformer Selection Table).

## **Output:**

- 6VDC, 12VDC or 24VDC selectable output.
- 4A supply current.\*
- Filtered and electronically regulated outputs.
- Short circuit and thermal overload protection.

#### **Visual Indicators:**

• AC input and DC output LED indicators.

## **Battery Backup:**

- Built-in charger for sealed lead acid or gel type batteries.
- Maximum charge current 0.3A.
- Zero voltage drop when switching over to battery backup.

#### **Features:**

- · Extremely compact design.
- Includes battery leads.
- Snap Trac compatible (order Altronix model number ST3).

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

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

# **Voltage Output/Transformer Selection Table:**

Output	Switch Position		Transformer Requirements
Voltage	SW1	SW2	(Recommended Altronix Part #'s)
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:**

SMP5 should be installed in accordance with The National Electrical Code and all applicable Local Regulations.

- 1. Mount SMP5 board in the desired location/enclosure (mounting hardware included).
- 2. Set DC output voltage with switches (Voltage Output/Transformer Selection Table).
- 3. Connect a proper transformer to the terminals marked [AC] (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.

CAUTION: Do not touch exposed metal parts.

Shut branch circuit power before installing or servicing equipment.

There are no user serviceable parts inside. Refer installation and servicing to qualified service personnel.

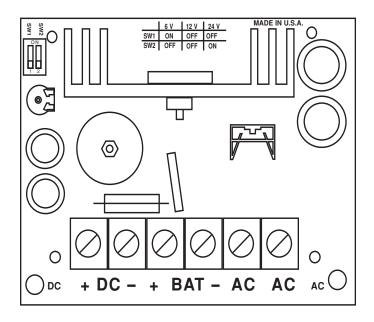
- 5. Connect devices to be powered to the terminals marked [+ DC -].
- 6. When the use of stand-by batteries is desired, they must be lead acid or gel type.

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.

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



## **LED Diagnostics:**

Red (DC)	Green (AC)	Power Supply Status		
ON	ON	Normal operating conditions		
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 (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 28VAC or 45VDC (maximum input rating).
+ DC -	6VDC, 12VDC or 24VDC @ 4A continuous supply current.
+ BAT -	Stand-by battery connections. Maximum charge rate 300mA.

