



# SMP3PM Supervised Power Supply/Charger

### Overview:

SMP3PM supervised power supply/charger converts low voltage AC input into 12VDC or 24VDC @ 2.5 amp of continuous supply current (see specifications).

### Specifications:

- 12VDC or 24VDC selectable output.
- Maximum charge current .5 amp.
- 2.5 amp continuous supply current at 12VDC-24VDC.
- Filtered and electronically regulated outputs.
- Built-in charger for sealed lead acid or gel type batteries.
- Automatic switch over to stand-by battery when AC fails (zero voltage drop).
- AC input and DC output LED indicators.
- AC fail supervision (form "C" contact).
- Low battery supervision (form "C" contact).
- Short circuit and thermal overload protection.
- Includes battery leads.

Board Dimensions: 7"L x 4"W x 1.75H

Specified at 25° C ambient.

### Voltage Output/Transformer Selection Table:

Output VDC	Switch Position	Max. Load DC	Transformer Requirements (Recommended Altronix Part #'s)
12VDC	SW 1 Closed	2.5 amp	16VAC / 40VA (TP1640), 24VAC or 28VAC / 100VA (T2428100)
24VDC	SW1 Open	2.5 amp	24VAC or 28VAC / 100VA (T2428100)

**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 SMP3PM should be installed in accordance with The National Electrical Code and all applicable Local Regulations.

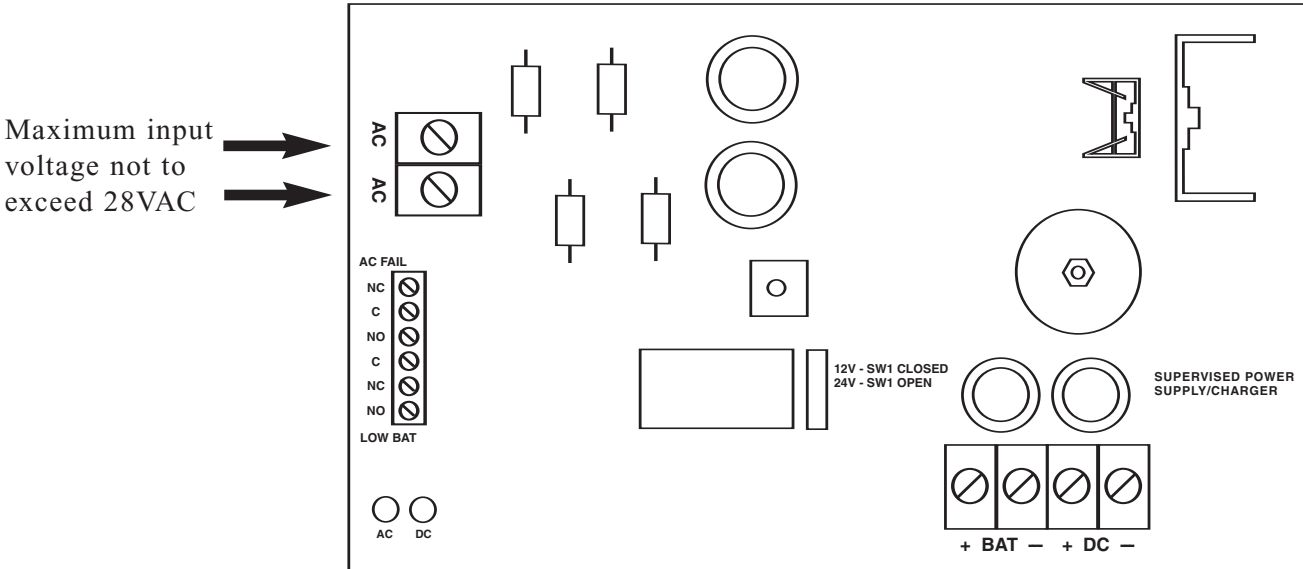
1. Mount the SMP3PM in desired location/enclosure.
2. Set the SMP3PM to desired DC output voltage via SW1 (see power supply voltage output specifications chart).
3. Connect proper transformer to terminals marked [AC](see voltage output/transformer selection table).  
Use 18 AWG or larger for all power connections (Battery, DC output).  
Use 22 AWG to 18 AWG for power limited circuits (AC Fail/Low Battery reporting).
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 +] on the board (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.
7. Connect appropriate signaling notification devices to AC Fail & Low battery supervisory relay outputs marked [NC, C, NO].

**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 12VDC output use 16VAC or higher with 24VA 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 -	12VDC or 24VDC @ 2.5 amp continuous output.
AC FAIL NC, C, NO	Used to notify loss of AC power, e.g. connect to audible device or alarm panel. Relay normally energized when AC power is present. Contact rating 1 amp @ 120VAC / 28VDC
Low Battery NC, C, NO	Used to indicate low battery condition, e.g. connect to alarm panel. Relay normally energized when DC power is present. Contact rating 1 amp @ 120VAC / 28VDC. Low battery threshold: 12VDC output threshold set @ approximately 10.5VDC, 24VDC output threshold set @ approximately 21VDC.
+ BAT -	Stand-by battery connections. Maximum charge rate .5 amp.



Altronix is not responsible for any typographical errors. Product specifications are subject to change without notice.

