

# SMP3PM Supervised Power Supply/Charger

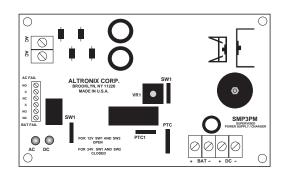
#### Overview:

The SMP3PM is a supervised power limited supply/chargers that will convert a low voltage AC input, into a 12VDC or 24VDC power limited output, with 2.5 amps of continuous supply current (see specifications).

#### **Specifications:**

- Switch selectable 12VDC or 24VDC power limited output
- Maximum charge current .5 amps
- 2.5 amps continuous supply current at 12/24VDC
- 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" contacts)
- Low battery supervision (form "C" contact)
- Short circuit and thermal overload protection
- Includes battery leads

Board Dimensions: 6.5"L x 3.5"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, 2 Open	2.5 amps	16 VAC / 40 VA (TP1640, T24130 or T2885)
24VDC	SW1, 2 Closed	2.5 amps	28 VAC / 85 VA (T2885)

**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.

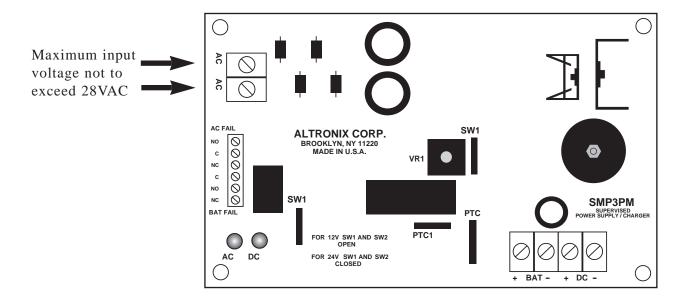
- 1. Mount the SMP3PM in desired location.
- 2. Set the SMP3PM-CTX to desired DC output voltage via SW1 (see power supply voltage output specifications chart).
- 3. Connect proper transformer to terminals marked AC (see voltage output/transformer selection table). Use 18 AWG or larger for all power connections (Battery, DC output). Use 22 AWG to 18 AWG for power limited circuits (AC Fail/Low Battery reporting).
- 4. Connect devices to be powered to terminals marked + DC -.
  - **Note:** It is good operating practice to measure and verify output voltage before connecting devices to ensure proper operation of equipment.
- 5. When the use of stand-by batteries are desired, they must be lead acid or gel type. Connect battery to terminals BAT + as marked on the unit (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.
- 6. 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
OFF	OFF	Loss of AC. Discharged or no stand-by battery. No DC output.

## **Terminal Identification:**

Terminal Identification	Function/Description	
AC/ AC	Low voltage AC input (see voltage output/transformer selection table).  For 12VDC output use 16VAC or higher with 24 VA power rating or higher.  For 24VDC output use 28VAC with 85 VA power rating or higher.  Caution: Do not apply voltages above 28 VAC (28 VAC is maximum input rating)	
+ DC -	12 / 24VDC 2.5 amps continuous power limited 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 1amp @ 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 1amp @ 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 amps.	



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

