

# SMP3PM-CTX/220 Supervised Power Supply/Charger

## Overview:

The SMP3PM-CTX/220 is a power limited supply/chargers that will convert a 220 VAC, 50 / 60Hz input, into a 12 VDC or 24 VDC power limited output, with 2.5 amps of continuous supply current (see specifications).

#### **Specifications:**

- Switch selectable 12VDC or 24VDC.
- Input 220 VAC, 50/60Hz, .35 amp.
- Maximum charge current .5 amp.
- 2.5 amps continuous supply current at 12VDC and 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" contacts).
- Short circuit and thermal overload protection.
- Power supply is complete with enclosure and cam lock.
- Includes battery leads.

Specified at 25° C ambient.

Enclosure Dimensions: 15.5"H x 12"W x 4.5"D **Note:** Enclosure accommodates up to two (2) 12AH batteries

#### Power Supply Output Specifications: \*

Output VDC	Switch Position	Max. Load DC
12 VDC	SW 1 - Closed	2.5 amps
24 VDC	SW1 - Open	2.5 amps

## **Installation Instructions:**

The SMP3PM-CTX/220 should be installed in accordance with The National Electrical Code and all applicable Local Regulations.

- 1. Mount the SMP3PM-CTX/220 in desired location.
- 2. Set the SMP3PM-CTX/220 to desired DC output voltage via SW1 (see power supply output specifications chart).
- 3. Connect AC power to terminals marked [L & N], connect ground to terminal marked [G].

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). Keep power limited wiring separate from non-power limited wiring (AC Input, Battery Wires). Minimum .25" spacing must be provided.

- 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.
  \*Note: Power switch is used to turn off DC output voltage (However if battery is connected, its voltage will appear on the output). It disconnects the L (HOT) terminal from the rest of the board. When servicing the unit, AC mains should be removed.
- 5. 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) 12 VDC 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 BAT] supervisory relay outputs marked [N.O., C, N.C.].

# LED Diagnostics:

Red (DC)	Green (AC)	Power Supply Status
ON	ON	Normal function
ON	OFF	Battery backup is powering output
OFF	ON	No DC output
OFF	OFF	System off. No battery.

# **Terminal Identification:**

Terminal Legend	Function/Description
L, G, N	Connect 220 VAC 50/60 Hz to these terminals: L to Hot, N to Neutral, G to ground (if used).
+ DC -	12 / 24VDC - 2.5 amps continuous power limited output.
AC FAIL N.O., C, N.C.	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 @ 120 VAC / 28 VDC
Low Battery NO, C, NC	Used to indicate low battery condition, e.g. connect to alarm panel. N.O., C, N.C. Relay normally energized when DC power is present. Contact rating 1 amp @ 120 VAC / 28 VDC Low battery threshold: 12 VDC output threshold set @ approximately 10.5VDC, 24 VDC output threshold set @ approximately 21 VDC.
- 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.

