



# SMP10PM High Current Power Supply/Charger

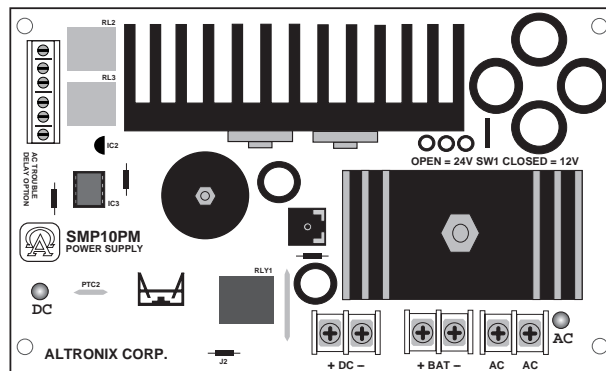
## Overview:

The SMP10PM is a high current power limited supply/charger that will convert a low voltage AC input, into a 12VDC or 24VDC power limited output, with 10 amps of continuous supply current (see specifications).

## Specifications:

- Field selectable 12-24VDC output
- 10 amps total continuous supply current (includes battery charging)
- Filtered and electronically regulated outputs
- Built-in charger for sealed lead acid or gel type batteries
- Maximum charge current 700mA
- Zero voltage drop when switching over to battery backup.
- AC input and DC output LED indicators
- AC fail supervision (form "C" contact, 1 amp 28VDC or 115VAC)
- Low battery and battery presence supervision (form "C" contact)
- Short circuit and thermal overload protection
- Includes battery leads

Board Dimensions: 7.0"L x 4.25"W x 2.0"H  
Specified at 25° C ambient.



**Note:** SMP10PM units are available completely assembled in an enclosure (15.5"H x 12"W x 4.5"D) with transformer and cam lock as the following model numbers: SMP-10PMC12X for 12 VDC output, SMP-10PMC24X for 24VDC output.

## Voltage Output/Transformer Selection Table:

Voltage	Switch Position	Transformer
12VDC @ 10 amps continuous supply current	Closed	28VAC / 175 VA (Altronix model T28140).
24VDC @ 6 amps continuous supply current	Open	28VAC / 175 VA (Altronix model T28140).
24VDC @ 10 amps continuous supply current	Open	28VAC / 300 VA (Altronix model T28300).

**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 SMP10PM should be installed in accordance with The National Electrical Code and all applicable Local Regulations.

1. Mount the SMP10PM in desired location.
2. Set the SMP10PM to desired DC output voltage via SW1 (see 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).  
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.
- 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.
  - Connect appropriate signaling notification devices to AC Fail & Low battery supervisory relay outputs marked NC, C, NO if desired.

### 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 18VAC or higher with 175 VA power rating or higher. For 24VDC output use 28VAC with 175VA power rating or higher. Caution: Do not apply voltages above 28VAC (28VAC is maximum input rating).
+ DC -	DC output terminals
AC FAIL NC, C, NO	Used to indicate loss of AC power, (e.g. connect to audible device or alarm panel). AC report delay is approx. 1 min. Relay normally energized when AC power is present. Contact rating 1amp @ 120VAC / 28VDC.
Low Battery NC, C, NO	Used to indicate low battery or battery presence condition, (e.g. connect to audible device or alarm panel). Battery presence delay is approx. 3 mins. Circuit will restore 5 secs. after battery is detected. Relay normally energized during proper battery operation. Contact rating 1 amp @ 120VAC / 28VDC. Low battery threshold: 12VDC output threshold set @ approximately 10.5VDC, 24VDC output threshold set @ approximately 21VDC. Battery Presence: 12 or 24VDC battery presence threshold is approximately 4VDC. Battery presence is automatically tested about every 5 mins. If battery is determined absent, the unit will automatically test for presence about every 5 secs.
- BAT +	Stand-by battery connections. Maximum charge rate 700mA.

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

