SMP3PM
Supervised Power Supply/Charger

Overview:

SMP3PM is a supervised power supply/charger that converts a low voltage AC input into a 12VDC or 24VDC selectable output with 2.5A of continuous supply current (see specifications).

Specifications:

Input:
• 16VAC to 28VAC
(Voltage Output/Transformer Selection Table).

Output:
• 12VDC or 24VDC selectable output.
• 2.5A supply current.
• Filtered and electronically regulated outputs.
• Short circuit and thermal overload protection.

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.

Supervision:
• AC fail supervision (form "C" contacts).
• Low battery supervision (form "C" contacts).

Indicators:
• AC input and DC output LED indicators.

Additional Features:
• Includes battery leads.

Board Dimensions *(L x W x H approximate)*:
• 4.05" x 7" x 1.35" (102.87mm x 177.8mm x 34.29mm)

Voltage Output/Transformer Selection Table:

Output VDC	Switch Position	Max. Load DC	Transformer Requirements
12VDC	SW1 ON	2.5A	16VAC/40VA (TP1640), 24VAC or 28VAC/100VA (T2428100)
24VDC	SW1 OFF	2.5A	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 board in desired location/enclosure.
2. Set the SMP3PM to desired DC output voltage via SW1 *(Voltage Output/Transformer Selection Table)*.
3. Connect proper transformer to the terminals marked [AC] *(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 avoiding potential damage.
5. Connect devices to be powered to the terminals marked [+ DC –].
6. When the use of standby batteries is 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].
   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.

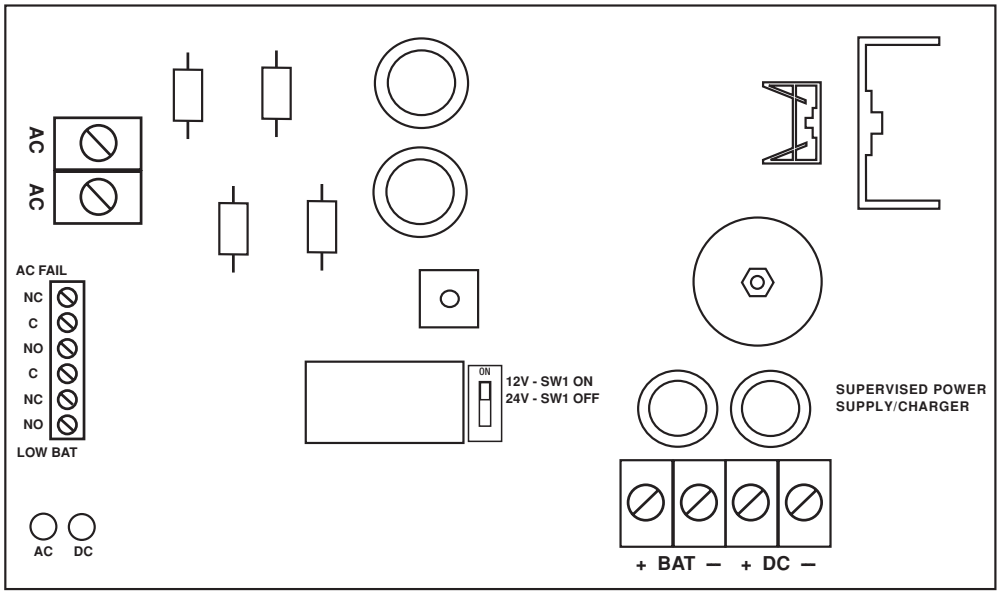
LED Diagnostics:

Red (DC)	Green (AC)	Power Supply Status
ON	ON	Normal operating condition
ON	OFF	Loss of AC. Standby battery supplying power.
OFF	ON	No DC output.
Off	Off	Loss of AC. Discharged or no standby battery. No DC output.

Terminal Identification:

Terminal Legend	Function/Description
AC/AC	Low voltage AC input *(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/24VDC @ 2.5A continuous output.
AC FAIL NC, C, NO	Used to notify loss of AC power, e.g. connect to audible device or alarm NC, C, NO panel. Relay normally energized when AC power is present. Contact rating 1A @ 120VAC / 28VDC
Low Battery NC, NO,	Used to indicate low battery condition, e.g. connect to alarm panel. NC, NO, C Relay normally energized when DC power is present. Contact rating 1A @ 120VAC / 28VDC. Low battery threshold: 12VDC output threshold set @ approximately 10.5VDC, 24VDC output threshold set @ approximately 21VDC.
+ BAT -	Standby battery connections. Maximum charge rate 0.3A.

Maximum input voltage not to exceed 28VAC



140 58th Street, Brooklyn, New York 11220 USA, 718-567-8181, fax: 718-567-9056
website: www.altronix.com, e-mail: info@altronix.com. Lifetime Warranty, Made in U.S.A.