



SM138-2A

13.8VDC Power Supply Module

Installation Instructions



The SM138-2A is a switchmode type 13.8VDC power supply module capable of supplying up to 2 amps DC continuous dependent on the rating of the input transformer (plugpack).

When used with an 18VAC plugpack the unit will supply 1 Amp continuous with very little heat. For higher currents up to 2 amps an input transformer of 16-18VAC 3 amps capability will be required. In a 2 amp configuration heat generated is still of an acceptable level.

The product features a battery charging circuit which will trickle charge/maintain a 12V Sealed Lead Acid (SLA) battery for backup purposes. This circuit will not charge a flat battery. The output is fused at 5 Amps. Should no backup battery be in place then the fuse should be reduced to 1.5Amp (1 amp supply) or 3Amp (2 amp supply) to ensure protection.

Terminals & Indicators

BAT +	-	Connect RED battery lead to this terminal (positive of battery)
BAT -	-	Connect BLACK battery lead to this terminal (negative of battery)
AC	-	Connect 16 - 18VAC plugpack to this terminal
AC	-	Connect 16 - 18VAC plugpack to this terminal
+	-	These TWO terminals are the 13.8VDC output for connection of a load
-	-	These TWO terminals are the return (-) for the 13.8VDC output
LD1	-	Red LED to indicate the presence of DC voltage at the output

Mounting

The power supply module has 3 x 4mm mounting holes. Included with the supply are 3 x 6.4mm adhesive standoffs which will clip into the holes allowing simple mounting to a CLEAN, DRY surface. We recommend cleaning the mounting surface with alcohol prior to sticking the power module down.

Specifications

Input voltage	16 - 22VAC @ 50Hz
Maximum Current	2 Amps continuous
Output Voltage	13.8VDC +/- 0.3V (2%)
Load Regulation	+/-0.15V (1%)
Output Ripple	< 18mVpp

The above figures are with a **1 Amp Load , 18VAC plugpack**

Dimensions 94mm (L), 76mm (W), 35mm (H) including standoffs

All specifications and features are subject to change without notice in the interests of product development.
Made in Australia by Circuit Level Electronics (Aust) Pty Ltd ABN 51 074 517 570

