

PRODUCT GUIDE – POWER SUPPLY/CHARGER

24V DC 3 AMP CHASSIS UNIT REF. ENS-003

General

This chassis unit is designed for use in OEM equipment

This power supply unit will supply current for a 24V DC 2.5 Amp load and also incorporates a 27.6V DC charger for use with Sealed Lead Acid Batteries. The unit is capable of charging up to 7Ah wiyhin 24 hrs.. Batteries should be 2 x 12v, wired in series and of equal type and state of charge. The output load should not exceed 2.5 Amps. The unit should be firmly fitted using the fixing slots provided and vent hole(s) should be provided in the cabinet for any heat dissipation.

* Note: The charger circuit incorporates 'real' battery monitoring in accordance with EN 54 – 4. There will be charging voltage present at the battery terminals only when a battery is connected (this is pre-set at the factory to approx. 27.6V), otherwise the measured voltage will be approx. 2.0V. In the absence of mains the power supply will change over to battery back up which will continue to supply the load until the battery voltage drops to approx. 21V.

Supply

Supply to the unit should be 240V ac 50Hz and an earth should be fed to the unit via a 5 amp -fused supply. The mains supply in the enclosure should be wired into the fused terminal block on the base of the chassis. The unit should be earthed.

Operation

This unit as supplied will give out voltage continuously at the terminals, which are marked 'LOAD. Polarity is marked and must be observed.

Connections

Refer to PCB terminal text.

PCB left to right:

3 pin jumper output for external indicators

5 pin jumper – DO NOT USE

4 way terminals –ve/-ve/+pos/+pos dc volts

2 way terminals batt –ve/batt+ve (NOTE – no output unless battery connected)

Fault relay NO/Com/NC

Indicators

Green = Supply Healthy

Amber = Fault

When the Green light only is illuminated, the unit is operating normally with supply to the load and the batteries (when fitted) are receiving charge current. When the Amber light is illuminated at the same time as the Green light there is a fault on either or both of the output supply and the charge supply. If the Green light is NOT illuminated, the mains supply is not present.

PCB Fuses:

Electronic shutdown – no replaceable parts

Specification:

Input voltage:	240v ac +/-5%
Output voltage:	26v dc +/-5%
Normal charging vol (floating):	27.6v dc +/- .5v
Environmental:	-10°C to 55°C @ 95% rel humidity
Dimensions:	125mmL x 122mmW x 50mmH
Weight:	.45Kg