



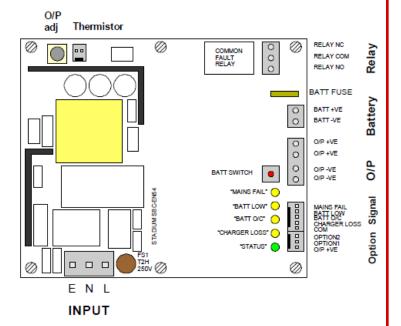
#### **Datasheet**

## **RS Pro Power Supply**

**RS Stock No:** 106-5818



#### **Connection Diagram**



#### Features:

- Single output plus battery charger
- Deep discharge battery protection
- Reverse battery protection
- High efficiency
- Cased unit
- Low touch currents
- Meets requirements for EN54-4 1998 inc Amends 1&2
- Meets requirements of EN61000-3-2 PFC Class A
- Meets requirements of EN55022 'B' for conducted noise
- Signalling can be factory programmed to customer requirements
- CE marked to LVD. Certified to EN60950.





# Specifications:

Input		
Input Voltage	100 – 230V ac +/-10%	
Frequency Range	50-60Hz	
Temperature Range	0 - 50°C ambient (Convection cooled, cased)	
Input Fuse	T2H 250V TR5	
Input Current	1.1Arms (90Vacin, Full load)	
Hold-Up Time	10mS (110Vacin, full load, no battery connected) 85mS (230Vacin, full load, no battery connected)	
Power Factor	0.45 (230Vacin, full load)	
No Load Power	1.5W (230Vacin)	
Start-Up	Less than 3 seconds, 100Vacin	
Output		
Output Voltage	27.6V (factory set for operation with thermistor)	
Output Current	1.2A	
Power Limit	115% +/-10% (110Vacin)	
Efficiency	80-85% Typ.@230Vacin, full load	
OVP	105-125% (latching and non dissipative) recycle input to restart	
Short Circuit Protection	Hiccup mode	
Signals	Mains Fail, Battery O/C, Charger Loss, Battery Low - LED's & open collector – 100mA sink, Status LED Green = Flashing = OK Common Fault (Volt free) relay 2x Customer options – open collector – 30mA sink HiZ indication =2J Battery Powerfail signal = 100mS	
Current Limit	Primary side power limit	
Thermal Protection	Primary side thermal protection (non-latching)	
Load Regulation	+/- 0.75%	
Line Regulation	+/- 0.5%	
Noise & Ripple	0.5% (230Vacin, Full load, BW = DC – 10MHz)	
Battery		
Charger	Current limited @ 0.35A	
Temp Compensation	Connector provided for user to add 100KI thermistor (β=4400) suitable for standby use	
Deep Discharge Protection	21V +/- 0.25V	





### Specifications:

Environment		
Temperature	-10°C to +70°C (Derate 2.5% / °C above 55°C)	
Cooling	Convection only	
Humidity	10-95% non-condensing	
Storage	-25ºC to +85ºC	
MTBF	>80,000 hrs 25°C (MIL217F parts count method)	
Safety & Regulatory Specifications		
PSU Class	Class I:- Component part	
Safety	Certified to EN60950, CE marked against LVD Designed to meet to UL60950	
Flash Test	Uncased units: I/p to O/p 4300V DC Cased units: I/p to O/p & E 2200V DC	
Earth Leakage Current	<300uA rms (230Vacin 50Hz)	
Output Touch Current	<100uA rms (230Vacin 50Hz)	
EMC – Conducted	Designed to meet requirements of EN55022 "Class B"	
EMC – Radiated	Designed to meet requirements of EN55022 "Class A"	
EMC – Power Factor	Designed to meet requirements of EN61000-3-2 "Class A"	
EMC – Fast Transients	Designed to meet requirements of EN61000-4-4	
EMC – Surge	Designed to meet requirements of EN61000-4-5	
EMC – Voltage Dips & Fluctuations	Designed to meet requirements of EN61000-4-11	
	EMC will require re-evaluation in host equipment	
Mechanical		
Dimensions	124mm x 122mm x 39.5mm (H)	
Fixings	4x 4.2mm holes on a 109 x 114mm pitch	
Case Material/Finish	Zintec	
Input Connector	CAMDEN CTB0118 or equivalent	
Output Connectors	Power = CAMDEN CTB0108 or equivalent Signal = MOLEX 6410 Vertical friction lock or equivalent	
Weight	450 grams	