



\* **NOTE:** Some models do not have front panel switches

Ideal as Standby Float Charger for lead acid batteries

◆ 24 Month Warranty



- Suitable for power supply or battery charging
- Conservative design for long life
- Easy installation with many options
- Wide input voltage window tolerance
- Precise voltage and current controls
- Efficient modern 'current-mode' topology
- Temperature compensation option
- Optional relay alarm outputs - model SR250D
- Fully designed and manufactured in New Zealand
- ISO9001 design management system

- 12V model for motor homes available without a cooling fan or switches for operation in ambients < 35°C (SR250K12X)
- Designed and manufactured to very high standards to ensure many years of trouble free operation.

**SPECIFICATIONS** All specifications are typical at nominal input, full load and at 20°C unless otherwise stated.

ELECTRICAL	
<b>Input Voltages</b>	
▪ standard	180V - 264V, 45-65Hz 200 - 375VDC
▪ optional (internal link selectable)	88V - 132V, 45-65Hz 110-180VDC
<b>Fusing / Protection</b>	Internal input fuse
<b>Isolation</b>	3.5KVAC 1 min. in/output 1KV DC input/earth
<b>Efficiency</b>	≥ 85%
<b>Inrush current</b>	Soft start circuit
<b>Output Power</b>	250W continuous (0 - 50°C)
<b>Output Voltages (nominal)</b>	13.8V, 24V, 30V, 36V, 48V Other voltages by request.
<b>Voltage adj. range</b>	85 - 115% of Vout
<b>Temp. Compensation (option)</b>	Temperature sensor on 1.7m lead with adhesive pad: -4mV / °C / cell ±10%
<b>Overcurrent Protection</b>	Constant current limit under overload and short circuit conditions
<b>Line Regulation</b>	<0.2% over AC input range
<b>Load Regulation</b>	<0.4% open circuit to 100% load
<b>Noise</b>	<1%
<b>Drift</b>	0.03% / °C
<b>Hold-up time</b>	15 - 20 mS (nom. - max. Vin) without battery
<b>Thermal Protection</b>	Automatic current reduction if >50°C. Self-resetting
<b>OVP</b>	Over-voltage protection on output at ~ 130% of nominal output voltage

PHYSICAL	
<b>AC Input connector</b>	IEC320 inlet socket (similar to PCs etc.)
<b>DC Connections</b>	M6 brass stud: or 'Phoenix combicon' Plug-in style socket & mating screw terminal block: (max. wire 4mm <sup>2</sup> / way)
<b>Enclosure</b>	Powder coated or zinc plated steel / anodised aluminium
<b>*Indication LEDs</b>	Green : DC Power OK, Red : Standby
<b>Weight</b>	1.7 Kg
<b>Alarms (optional)</b>	Plug in screw terminal block. Alarm contacts: C - NO - NC full changeover rated 1A /50V DC, 32VAC

ENVIRONMENTAL	
<b>Operating temperature</b>	0 - 50 °C ambient at full load De-rate linearly >50 °C to no load @ 70 °C
<b>Storage temperature</b>	-10 to 85 °C ambient
<b>Humidity</b>	0 - 95% relative humidity non-condensing
<b>Cooling</b>	Natural convection except for 12V fan cooled.  <b>Note:</b> SR250K12X for motor homes has no fan, ambient must be < 35° C .
<b>Standby Mode</b>	Turns off DC output of PSU

STANDARDS	
<b>EMI</b>	To CISPR 22 / EN55022 class A
<b>Safety</b>	To IEC950 / EN60950 / AS/NZS3260

ACCESSORIES SUPPLIED	
Mounting Feet together with screws	
AC power cord Standard 1.5m lead with IEC320 socket / local plug	
'Phoenix combicon' DC connector for 'X' version	
Mating screw-terminal plug for alarm outputs	
Crimp lugs for stud terminal versions	

# 250 Watt AC/DC Stand Alone Power Supply/Float Charger



## STANDARD PREFERRED MODEL TABLE

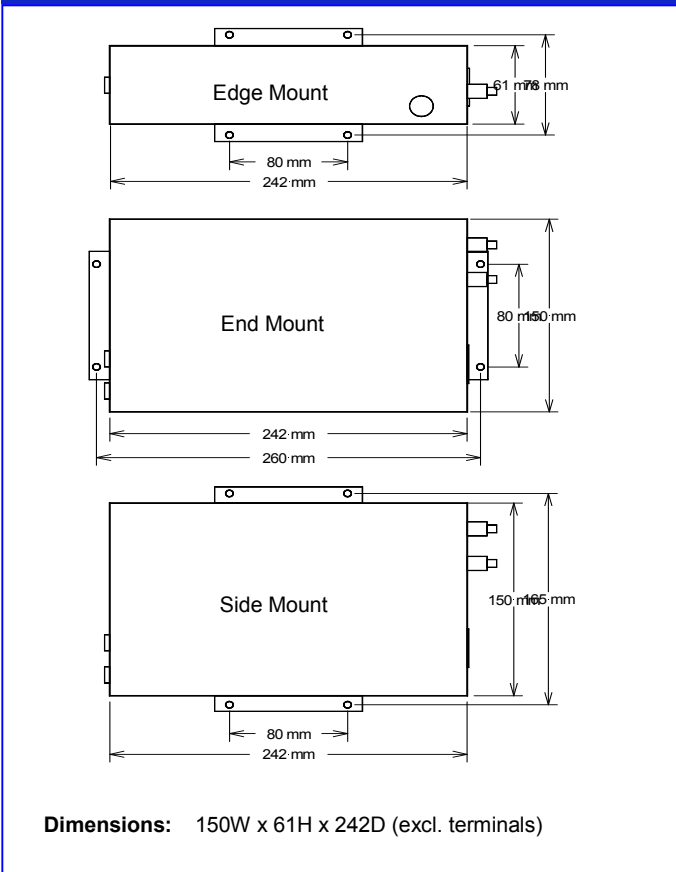
MODELS	Output Voltage (factory default)	Output Current (A)	Adjustable range (V)
SR250A12	13.8	18.2 @13.8V (20.2 @ 12V)	11-14
SR250A24	24	10.4	22-28
SR250A30	30	8.3	28-36
SR250A36	36	6.9	34-43
SR250A48	48	5.2	45-57

## BATTERY CHARGING

Please specify on ordering if unit is for power supply or battery charging duty. The voltage for charging is set at 15% above the nominal voltage:

Model	Volts	Rated Amps
SR250x12	13.8	18.2
SR250x24	27.6	9.1
SR250x36	41.4	6.0
SR250x48	55.2	4.5

## MOUNTING DETAILS / DIMENSIONS



## OPTIONS

<b>Rack mount</b>	2U x 19" rack - (rear connection)
<b>Wall Mount Case</b>	Includes two MCBs and terminals
<b>Distribution Panel</b>	3U x 19" rack with MCBs
<b>Temperature Compensation</b>	For accurate battery charging, temperature compensation adjusts voltages in accordance with external temperature probe Order Code: <b>F+TEMPCO</b>
<b>Alarms (SR250D..)</b>	<ul style="list-style-type: none"> <li><b>Mains/PSU fail</b> (or PSU in standby-mode)</li> <li><b>DC low</b> (Battery low or PSU low)                             <ul style="list-style-type: none"> <li>- Charger: set at 1.83V/cell</li> <li>- PSU: set at 83% V out</li> </ul> </li> </ul>
<b>Alarms (SR250L..)</b>	SR250D.. with extra DC fault alarm (eg. DC high, level to be specified at time of order)
<b>Earth Fault Alarm</b>	Detects leakage to earth of DC output and provides relay output Order Code: <b>F+EFDLV</b> (24-50V models) <b>F+EFDHV</b> (48-150V models)
<b>Parallel Redundancy</b>	Combine two or more 'D' units with output diodes for N+1 redundancy. ("P" version available for 24 & 48V, with output diode fitted internally)
<b>Reverse Polarity Protection (RPP)</b>	<b>SR250K12X</b> has fused RPP, LED indicates charger on, no fan or on/off switch (designed for use in motor homes, ambient temperature < 35°C)

## MODEL CODING AND SELECTION CHART

# SR250A 12 T F S L

