



Ideal as Standby Float Charger for lead acid batteries



◆ 24 Month Warranty

- Suitable for power supply or battery charging
- Conservative design for long life
- Rapid install with all plug-in connections
- Wide input voltage window tolerance
- Precise voltage and current controls
- Efficient modern 'current-mode' topology
- Temperature compensation option
- Optional relay alarm outputs - model SR500D..
- Fully designed and manufactured in New Zealand
- ISO9001 design management system

- The SR500A DC power supply is a solid, reliable performer for a multitude of DC power applications up to 500W.
- 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	
Input	
▪ standard	180V - 264V, 45-65Hz
▪ optional	88V - 132V, 45-65Hz
Fusing / Protection	Internal input fuse
Isolation	3.5KVAC 1 min. in/output 1KV DC input/earth
Efficiency	≥ 85%
Inrush current	Soft start circuit
Output Power	500W continuous (0 - 50°C)
Output Voltages (nominal)	13.8V, 24V, 30V, 36V, 48V Other voltages by request
Voltage adj. range	90 - 120% of Vout
Temp. Compensation (option)	Temperature sensor on 1.7m lead with adhesive pad: -4mV / °C / cell ±10%
Overcurrent Protection	Constant current limit under overload and short circuit conditions (except DC input versions)
Line Regulation	<0.2% over AC input range
Load Regulation	<0.4% open circuit to 100% load
Noise	<1%
Drift	0.03% / °C
Hold-up time	15 - 20 mS (nom. - max. Vin) without battery
Thermal Protection	Automatic current reduction if >50°C. Self-resetting
Overvoltage Protection	Yes, at ~ 130% of nominal output voltage
Parallel Operation	Yes, for increased power

PHYSICAL	
AC Input connector	IEC320 inlet socket (similar to PCs etc.)
DC Connections	M8 brass stud: or 'Phoenix combicon' Plug-in style socket & mating screw Terminal block: (max. wire 4mm ² / way)
Enclosure	Powder coated aluminium
Indication LEDs	Green : DC Power OK, Red : Standby
Weight	4.3 Kg
Alarm Connections (optional)	Plug in screw terminal block (max. wire 2.5mm ²) Contacts: C - NO - NC full changeover rated 1A /50V DC, 32VAC

ENVIRONMENTAL	
Operating temperature	0 to + 50 °C ambient at full load De-rate linearly >50 °C to no load @ 70 °C
Storage temperature	-10 to 85 °C ambient
Humidity	0 - 95% relative humidity non-condensing
Cooling	Fan cooled
Standby Mode	Turns off DC output of PSU

STANDARDS	
EMI	To CISPR 22 / EN55022 class A
Safety	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	

500 Watt AC/DC Stand Alone Power Supply/Float Charger



STANDARD PREFERRED MODEL TABLE

MODELS	Output Voltage (factory default)	Output Current (A) (continuous)	Adjustable range (V)
SR500A12	13.8	36.2 (41.6 @ 12V)	11-14
SR500A24	24	20.8	22- 29
SR500A30	30	16.6	28-35
SR500A36	36	13.8	34-43
SR500A48	48	10.4	45-57
SR500A91	96	5.2	90-110
SR500A92	108	4.6	100-124
SR500A93	120	4.1	110-145

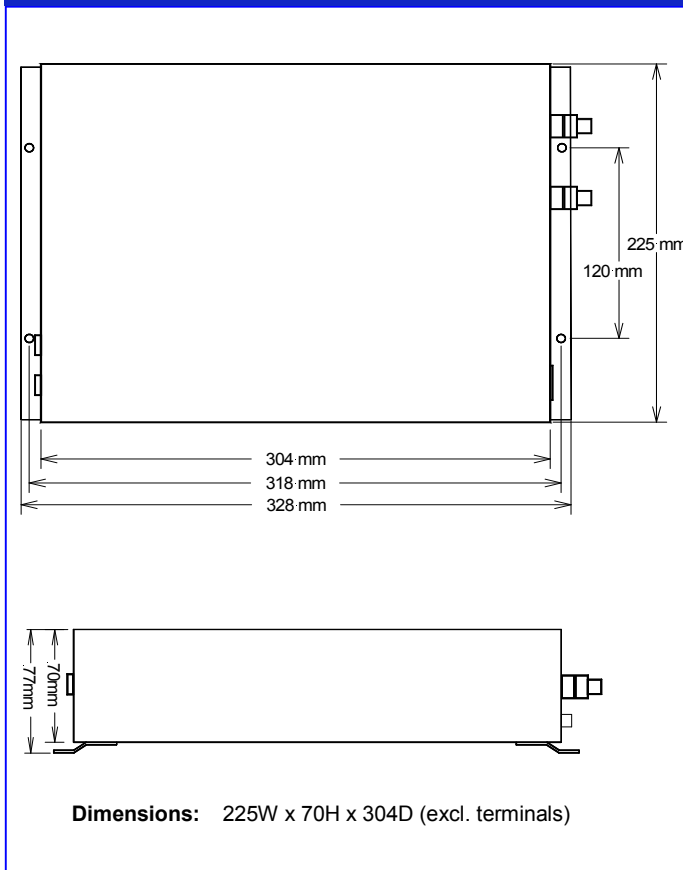
BATTERY CHARGING

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
SR500x12	13.8	36.2
SR500x24	27.6	18.2
SR500x36	41.4	12.0
SR500x48	55.2	9.1
SR500x91	110	4.5
SR500x92	124	4.0
SR500x93	138	3.6

x = A or D type

MOUNTING DETAILS / DIMENSIONS



ADDITIONAL OPTIONS (Physical)

- Rack mount** 2U x 19" rack - (rear connection)
- Wall Mount Case** Includes two MCBs and terminals

ADDITIONAL OPTIONS (Electrical)

- Temperature Compensation** For accurate battery charging, temperature compensation adjusts voltages in accordance with external temperature probe
Order Code: **+TEMPCO**
- Alarms (SR500D..)**
 - **Mains fail** (or PSU in standby mode)
 - **DC low** (Battery low or PSU low)
 - Charger: set at 1.83V/cell
 - PSU: set at 83% V out
- Alarms (SR500L..)** SR500D.. with extra DC fault alarm
- Earth Fault Alarm** Alarm relay output when either + or - output is less than 77Kohms to earth
Order Code: **+EFDLV** (24-50V models)
+EFDHV (48-150V models)
- Parallel Redundancy** Use SR500D... units and **external** output diodes for N+1 redundancy
Refer page 118 for typical connections
- DC Input** Voltage ranges: 110-180VDC
200-375VDC
Please note that an external fuse is required to be fitted (by the user) on the output for short circuit protection.

MODEL CODING AND SELECTION CHART

SR500A 12 T F S L

