



*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 SR100D
  - Fully designed and manufactured in New Zealand
  - ISO9001 design management system
- The SR100A DC power supply is a solid, reliable performer for a multitude of DC power applications up to 100W.
  - Please specify on ordering if unit is to be used for battery charging duty (except for 12V version which is set for 13.8V as standard)

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

### ELECTRICAL

<b>Input</b>	180V - 264VAC 45-65Hz or 200 - 375V DC (standard)  88V - 132VAC 45-65Hz or 110-180VDC (on request)
<b>Fusing / Protection</b>	Internal AC input fuse
<b>Isolation</b>	3.5KVAC 1 min. in/output, 1KV DC input/earth
<b>Efficiency</b>	≥ 85%
<b>Inrush current</b>	<30A, 1.8ms
<b>Output Power</b>	100W Continuous (0 - 50°C)
<b>Output Voltages (nominal)</b>	13.8V, 24V, 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>	<0.04% over input range
<b>Load Regulation</b>	<0.5% open circuit to 100% load
<b>Noise</b>	<0.3%
<b>Transient response</b>	200mV over/ undershoot, load step 20-100%, 400us settling time
<b>Hold-up time</b>	15 - 20 mS (nom. - max. Vin) without battery

### PHYSICAL

<b>AC Input connector</b>	IEC320 inlet socket (similar to PCs etc.)
<b>DC Connections</b>	Plug-in style socket & mating screw terminal block: (max. wire 2.5mm <sup>2</sup> / way)
<b>Enclosure</b>	Zinc plated steel /powder coated lid
<b>Indicators</b>	Green LED for <b>DC Power OK</b>
<b>Weight</b>	0.94 Kg
<b>Dimensions</b>	146.5 W x 62 H x 177 D

### ENVIRONMENTAL

<b>Operating temperature</b>	0 - 50 °C ambient at full load De-rate linearly >50 °C to 0 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

### 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  
DC connector with mating screw-terminal plug

# 100 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)
SR100A12	13.8V	7.3 @13.8V (8.3 @ 12V)	11-14
SR100A24	24V	4.2	22-28
SR100A36	36V	2.8	34-43
SR100A48	48V	2.1	45-57

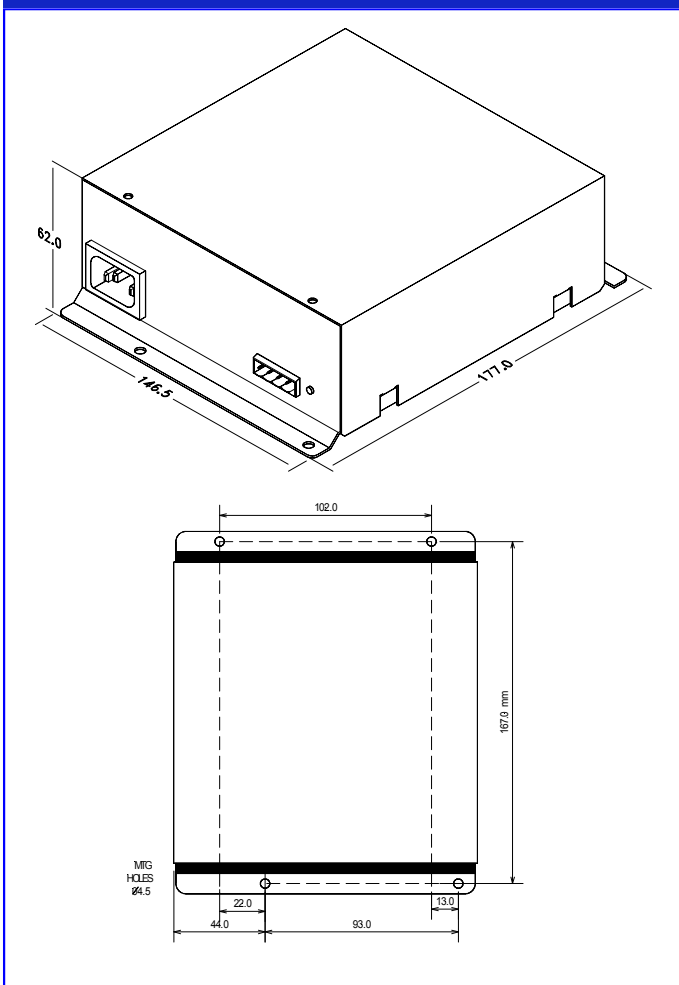
## BATTERY CHARGING

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
SR100x12	13.8	7.3
SR100x24	27.6	3.6
SR100x36	41.4	2.4
SR100x48	55.2	1.8

x = A or D type

## MOUNTING DETAILS / DIMENSIONS



## ADDITIONAL OPTIONS (Physical)

<b>Rack mount</b>	2RU x 19" rack - (rear connection) <i>Refer page 112</i>
<b>Wall Mount Cabinet</b>	Includes two MCBs and terminals - <i>Refer page 114</i>
<b>Distribution Panel</b>	3RU x 19" rack with MCBs - <i>Refer page 113</i>

## ADDITIONAL OPTIONS (Electrical)

<b>Temperature Compensation</b>	For accurate battery charging, temperature compensation adjusts voltages in accordance with external temperature probe Order Code: <b>+TEMPCO</b>
<b>Alarms (SR100D..)</b>	<ul style="list-style-type: none"> <li>• <b>Mains fail</b></li> <li>• <b>DC low</b> (Battery low or PSU low)                             <ul style="list-style-type: none"> <li>- Charger: set at 1.83V/cell (80% Vout)</li> <li>- PSU: set at 83% V out</li> </ul> </li> </ul>
• <b>Relay Contacts</b>	C - NO - NC full changeover rated 1A /50V DC, 32VAC
<b>Parallel Redundancy</b>	Use output diode for N+1 redundancy Refer page 118 for typical connections <b>24V &amp; above:</b> SR100P ... with alarms and diode <b>12V:</b> use SR100D12.. and <b>F+P15</b> diode outside of PSU case

## MODEL CODING AND SELECTION CHART

# SR100A 12 T X G

Input voltage :	230V AC = blank 110V AC = G 110V DC = J
Output DC Connection:	Stud = S,      Phoenix combicon (plug in screw terminal block) = X
Temperature Compensation	Yes = T    No = blank
DC output: Nominal voltage	12, 24, 36, 48
Function	A = Standard unit D = Standard unit with alarms P = D with internally fitted parallel redundancy diode (24, 48V only)