



**Fast and Safe recharging of lead acid batteries (sealed or flooded)**

◆ 24 Month Warranty

- Auto or manual initiated boost charge
- Designed to industrial standards
- Automatic temperature compensation
- Short circuit and reverse polarity protection
- Operating state and fault indication
- Fully programmable microprocessor control
- Can safely be left permanently connected to battery, will maintain 'float' charge
- Optional relay alarm outputs (SR250E)
- ISO9001 Design management system
- Fully designed and manufactured in NZ

The SR SmartCharger is designed to recharge your battery in the shortest practicable time with programmable parameters to suit your specific application.

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

ELECTRICAL	
Input - standard	180-264 or 88-132V, 45-65Hz (internal link select)
- option	88-135VDC (specify at time of order if DC input required, suffix -H)
Input protection	Internal fuse
Output protection	Automatic shutdown if battery leads reversed
Current limit	Constant current limit on overload & short circuit
Isolation	1KV DC input - output / earth
Efficiency	≥ 85%
Inrush current	Soft start
Output power	250W
Output voltages	12, 24, 30, 36, 48V (nominal)
Voltage adj. range	Approx 95 - 105% of V nominal
Temp. compensation	Output voltage compensated at -4mV / °C / cell
Line regulation	<0.2% over input range
Load regulation	<0.4% open circuit to 100% load
Noise	<0.3%
OVP	Over-voltage protection on output at ~ 130% of nominal output voltage
Thermal protection	Yes, self resetting

STANDARDS	
EMI	to CISPR 22 / EN55022 class A
Safety	to IEC950 / EN60950 / AS/NZS3260

FEATURES	
<b>Switch/ LED Indication &amp; functions</b>	<b>BOOST:</b> Red (Push button to boost) <b>FLOAT:</b> Green (Push button to 'force' float) <b>STANDBY:</b> Red (Push button to turn output off/on) Refer to instruction manual for full list of LED operation codes
<b>Factory programmable parameters</b>	- Start up in boost or float mode ( <b>Boost</b> ) - Current terminated boost ( <b>Yes</b> ) - Current initiated boost ( <b>Yes</b> ) - Start boost on mains return ( <b>Yes</b> ) - Pre-boost state timer 1-255 minutes ( <b>1</b> ) - Max boost charge time 0-48 hours ( <b>24</b> ) - Pre-float state timer 1-255 minutes ( <b>1</b> ) - Resume prior state upon mains return timer 1-255 minutes ( <b>10</b> ) - Resume on boost charge upon mains return 0-255 hours ( <b>24</b> ) - Pre-forced float timer 1-255 minutes ( <b>1</b> ) - Delay before mains fail recognition 4sec - 8.5minutes( <b>5 minutes</b> )
<b>(default settings shown in brackets)</b>	
<b>Please note that some parameters are interdependent of each other.</b>	

PHYSICAL	
<b>AC Input connector</b>	IEC320 socket (AC power cord supplied)
<b>DC Connections</b>	M6 brass stud or plug-in socket with screw terminals
<b>Enclosure</b>	Zinc plated steel base/ powder coated lid
<b>Temperature sensor</b>	1.7m lead with adhesive pad
<b>Weight</b>	1.7Kg

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 or fan cooled optional depending on model

# 250 Watt Three Stage Smartcharger (boost charger)

# SR250B

incl. SR250E

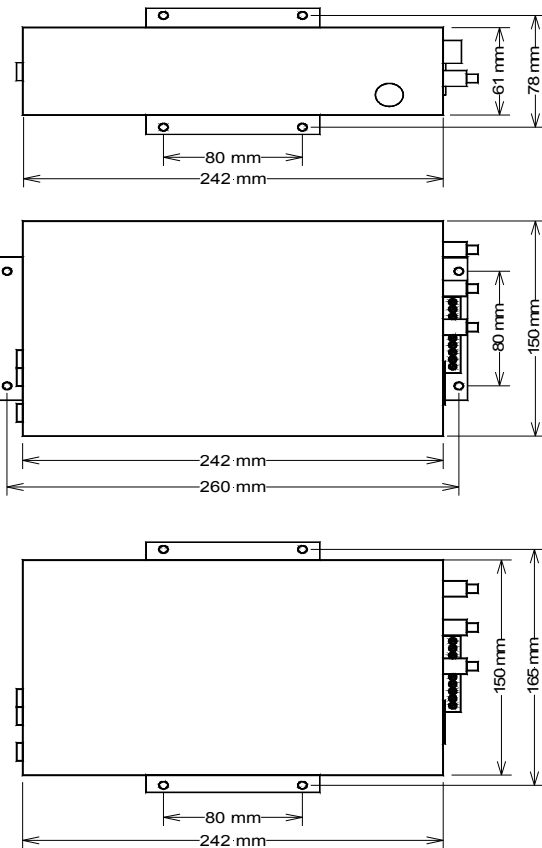
## STANDARD MODEL TABLE

MODELS	Float Voltage* <sup>1</sup>	Boost Voltage * <sup>1</sup>	Output Current (A)	Min - Max Battery (Ah)* <sup>2</sup>
SR250B12	13.8	14.7	16.7	65 - 200
SR250B24	27.6	29.4	8.3	30 - 100
SR250B30	34.5	36.7	6.8	27 - 90
SR250B36	41.4	44.1	5.6	22 - 70
SR250B48	55.2	58.8	4.2	15 - 50

\*<sup>1</sup> May be adjusted to suit battery specifications  
<sup>2</sup>Guidelines only. Please check manufacturer's recommendations.



## MOUNTING DETAILS / DIMENSIONS



## OPTIONS

- Alarm & boost/float indication relays\***  
 (Order Code: replace suffix -B with -E)
- **Mains fail**
  - **Batt low** (set at 1.83V/cell = 11, 22V, etc)
  - **Boost/float**
- Alarm Relay Contacts** C - NO - NC full changeover  
 Rated 1A @ 50V DC or 32VAC
- Adjustable Parameters** All firmware parameters listed under features may be adjusted at time of ordering

## MOUNTING OPTIONS

- Rack mount** 2RU x 19" rack - (rear connection)  
 Code: **SR-RM2U**
- Wall Mount Enclosure** Code: **SEC-SR**
- For full information on these options please refer to respective data sheets.

## WARNING

**If the SmartCharger is connected to operating equipment during charging:**

1. equipment will be subjected to 1.22 times the nominal voltage.
2. the standing load must be taken into account for the correct operation of the charger. Please contact our sales office if you have any standing load.

## MODEL CODING AND SELECTION CHART

# SR250B 12 T F S L

