



Optional V/I meter shown

- Suitable for all lead acid batteries
- Auto or manual initiated boost charge
- Designed to industrial standards
- Automatic temperature compensation
- Short circuit and reverse polarity protection
- LED indication shows operating state
- Fully programmable microprocessor control
- Can safely be left permanently connected to battery, will maintain 'float' charge
- Optional relay alarm outputs (SR500E ..)
- ISO9001 Design management system
- Fully designed and manufactured in NZ

◆ 24 Month Warranty

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

#### ELECTRICAL

<b>Input Voltage</b>	180V - 264V, 45-65Hz 88V - 132V , 45-65Hz (optional)
<b>Input protection</b>	Internal fuse
<b>Output protection</b>	Automatic shutdown if battery leads reversed
<b>Current limit</b>	Constant current limit on overload & short circuit
<b>Isolation</b>	1KV DC input - output / earth
<b>Efficiency</b>	≥ 85%
<b>Inrush current</b>	Soft start
<b>Output power</b>	500W
<b>Output voltages</b>	Refer to model table
<b>Voltage adj. range</b>	Approx 95 - 105% of V nominal
<b>Temp. compensation</b>	Output voltage compensated at -4mV / °C / cell
<b>Line regulation</b>	<0.2% over input range
<b>Load regulation</b>	<0.4% open circuit to 100% load
<b>Noise</b>	<0.1%
<b>OVP</b>	Over-voltage protection on output at ~ 130% of nominal output voltage
<b>Thermal protection</b>	Yes, self resetting

#### STANDARDS

<b>EMI</b>	to CISPR 22 / EN55022 class A
<b>Safety</b>	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 (default settings shown in brackets)*1</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 time (PBT) 1-255 minutes ( <b>1</b> ) - Max boost time (BT) 1-48 hours ( <b>24</b> ) - Pre-float 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 1-24 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>Please note that some parameters are interdependent of each other.</b>	
*1 except high voltage versions	

#### 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>	Powder coated steel
<b>Temperature sensor</b>	1.7m lead with adhesive pad
<b>Weight</b>	4.3 Kg

#### ENVIRONMENTAL

<b>Operating temperature</b>	0 to 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 to 95% relative humidity non-condensing
<b>Cooling</b>	Natural or fan cooled depending on model

# 500 Watt Three Stage Smartcharger (boost charger)

# SR500B

incl. SR500E

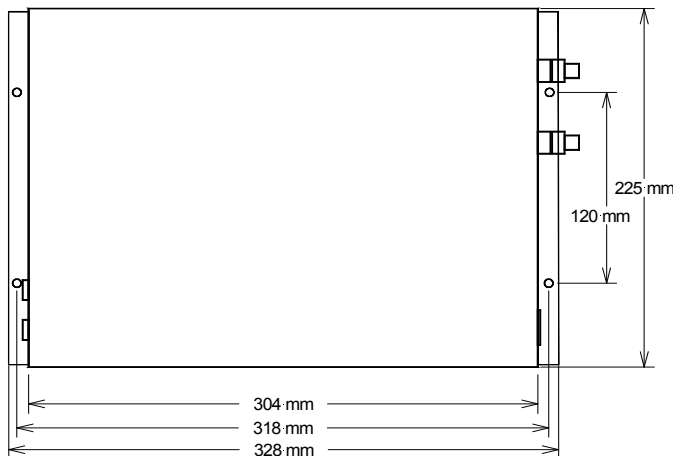
## STANDARD MODEL TABLE

MODELS	Nominal Voltage	Float Voltage	Boost Voltage	Output Amps (continuous)	Battery Size Ah
SR500B12	12	13.8	14.7	34	130-600
SR500B24	24	27.6	29.4	17	65-300
SR500B36	36	41.4	44.1	11.3	44-200
SR500B48	48	55.2	58.8	8.5	30-150
SR500B72*	72	82.8	88.6	5.6	22-95
SR500B91 *	96	110.4	117.6	4.2	16-75
SR500B92 *	108	124.2	132.8	3.7	15-65
SR500B93 *	120	138.	147.0	3.4	13-60

\* High voltage versions **SR500B72, 91, 92, 93** have a manual boost function. Initiation of boost charge is by pushing the BOOST switch or relay contact. Termination of boost charge is by manual push button (FLOAT or STANDBY) or by the time set by the internal timer (BT setting). They do not have a current terminated boost function.

These versions have **Mains Fail** and **Battery Low** alarms as standard but no boost/float indication relay.

## MOUNTING DETAILS / DIMENSIONS



DIMS: 225W x 77H (incl. feet) x 340D

## OPTIONS

<b>Alarm &amp; boost/float indication relays</b>	<ul style="list-style-type: none"> <li>• <b>Mains fail</b></li> <li>• <b>Batt low</b> (set at 1.83V/cell = 11, 22V, etc)</li> <li>• <b>Boost/float</b></li> </ul>
<b>Alarm Relay Contacts</b>	C - NO - NC full changeover Rated 1A @ 50V DC or 32VAC
<b>Output Volts</b>	May be adjusted to suit battery specifications
<b>Mode of Operation</b>	All firmware parameters listed under features may be adjusted at time of ordering

## MOUNTING OPTIONS

<b>Rack mount</b>	2RU x 19" rack - (rear connection) Code: <b>SR-RM2U</b>
<b>Wall Mount Enclosure</b>	Code: <b>SEC-SR</b>
	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

# SR500B 12 T F S L +Int-Meter

(with Volt/ Amp Meter) No = blank

Input voltage and front panel switches:	230V AC + switch = L 110V AC + switch = U	230V AC no switch = blank 110V AC no switch = G
Output DC Connector type:	Stud = S	Phoenix combicon (plug in screw t.b.) = X
Fan cooled:	With fan = F	No fan = blank
Temperature Compensation:	Yes = T	No = blank
DC output code	12, 24, 36, 48, etc	
Function	<b>B</b> = Standard <i>SmartCharger</i> for lead acid batteries <b>E</b> = Standard <i>SmartCharger</i> with alarms	
Power	500W	