



SMARTCHARGER 500-750W

FEATURES AND BENEFITS



- Suitable for all types of lead acid batteries
- Fully automatic operation
- Fully programmable microprocessor control
- Boost charge can be programmed to be manually initiated (eg. for equalisation charge)
- Designed to industrial standards
- Automatic temperature compensation
- Short circuit and reverse polarity protection
- Operating state and fault indication
- Can safely be left permanently connected to battery, will maintain 'float' charge
- Optional standard smartcharger without alarms outputs(SR500-SR750B)
- 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.

24 MONTH WARRANTY

 $SPECIFICATIONS \ {\it All specifications are typical at nominal input, full load and at 20 ^{\circ}C \ unless \ otherwise \ stated.}$

MODEL SPECS	SR500E	SR750E	
ELECTRICAL	*		
Input	STANDARD: 180V - 264VAC		
	OPTIONAL: 88V - 132VAC		
Frecuency	50 or 60Hz (to be specified at time of order)		
Fusing	Internal AC input fuse		
Isolation	1KV DC input - output / earth		
Efficiency	> 85%		
Inrush current	Soft start circuit		
Output power	500W	750W	
Output voltages	Refer to the model table		
Voltage adj. range	Approx 95 - 105% of V nominal		
Temp. Compensation	Temperature sensor on 1.7m lead with adhesive pad: $-4mV/^{\circ}C/$ cell $\pm 10\%$		
Current Limit	Constant current limit on overload & short circuit		
Output Protection	Automatic shutdown if battery leads reversed or short circuit on output		
Line regulation	< 0.2% over AC input range		
Load regulation	< 0.4% open circuit to 100% load		
Noise	<1%		
Drift	<0.1%		
Hold- up time	15 - 20 ms (nom max. Vin) witho	ut battery	
OVP	Over-voltage protection on output at $^\sim$ 130% of nominal output voltage		
Thermal Protection	Yes		
Alarm & boost/float indi-	Mains fail		
cation relays*	Batt low (set at 1.83V/cell = 11, 22V, etc)		
	Boost/float		
Alarm Relay Contacts	C - NO - NC full changeover Rated	d 1A @ 50V DC or 32VAC	
Output Volts	May be adjusted to suit battery specifications		
Adjustable Parameters	All firmware parameters listed und time of ordering	ler features may be adjusted at	

MODEL	SR500E	SR750E	
SPECS			
MECHANICAL			
AC Input Connector	IEC320 inlet socket (power cord s	supplied)	
DC Output Connection	M6 brass stud, or 'Phoenix combicon' Plug-in style socket & mating screw terminal block: (max. wire 4mm² / way)		
Enclosure	Powder coated or zinc plated steel / anodised aluminium		
Weight	4.3Kg		
FEATURES			
Switch/ LED Indication &	BOOST: Red		
functions	FLOAT: Green		
	STANDBY: Red (Push button to turn output off/on). Refer to instruction manual for full list of LED Operation codes		
Factory Programmable	Start up in boost or float mode (Boost)		
parameters (default settings	Current terminated boost (Yes)	·	
shown in brackets; please	Current initiated boost (Yes)		
note that some parameters	Start boost on mains return (Yes)		
are interdependent of each other)*1	Pre-boost state timer 1-255 minutes (1)		
otner)	Max boost charge time 1-48 hours (24)		
	Pre-float state timer 1-255 minutes (1)		
	Resume prior state upon mains return timer 1-255 minutes(10)		
	Resume on boost charge upon mains return 0-255 hours (24)		
	Pre-forced float timer 1-255 minutes (1)		
	Delay before mains fail recognition 4sec - 8.5minutes(5 minutes)		
	*1 except high voltage version:	S	
ENVIRONMENTAL			
Operating temperature	Standard: 0 to 50 °C ambient at C to no load @ 70 °C	full load ,De-rate linearly >50 °	
Storage temperature	-10 to 85 °C ambient		
Humidity	0 - 95% relative humidity non-co	ndensing	
Cooling	Fan cooled		
STANDARDS			
Emi	To CISPR 22 / EN55022 class A		
Safety	To IEC950 / EN60950 / AS/NZS32	60	
ELECTRICAL OPTIONS			
Alarms	If is required the standard	If is required the standard smartcharger without alarms please ask for SR750B refer- ence.	
MOUNTING OPTIONS			
Rack mount	2RU x 19" rack - (rear connection)Code: SR-RM2U	
Wall Mount Enclosure	Code: SEC-SR		



SR250ESMARTCHARGER 250W

SR500E TABLE

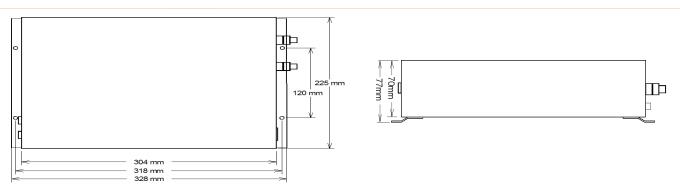
SR750E TABLE

MODELS	Nominal Voltage (W)	Output Voltage ¹ (float V)	Output Voltage (max boost A)	Output Current (continuous A)	Min - Max Battery (Ah)Size
SR500E12	12	13.8	14.7	34	130-600
SR500E24	24	27.6	29.4	17	65-300
SR500E36	36	41.4	44.1	11.3	44-200
SR500E48	48	55.2	58.8	8.5	30-150
SR500E72*	72	82.8	88.6	5.6	22-95
SR500E91 *	96	110.4	117.6	4.2	16-75
SR500E92 *	108	124.2	132.8	3.7	15-65
SR500E93 *	120	138	147	3.4	13-60

MODELS	Nominal Voltage (W)	Output Voltage ¹ (float V)	Output Voltage (max boost A)	Output Cur- rent (continuous A)	Min - Max (Ah) Battery Size
SR750E12	12	13.8	14.7	50	200-900
SR750E24	24	27.6	29.4	25	100-450
SR750E36	36	41.4	44.1	16.7	66-300
SR750E48	48	55.2	58.8	12.5	50-220
SR750E72*	72	82.8	88.6	6	27-120
SR750E91 *	96	110.4	117.6	6.2	25-110
SR750E92 *	108	124.2	132.8	5.6	22-100
SR750E93 *	120	138	147	5	20-90

^{*} Note: High voltage versions SR750B72, 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.

MOUNTING DETAILS / DIMENSIONS



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

MODEL	INPUT VOLTAGE	VOLT/AMP METER	OUTPUT CONNECTOR
SR500E12	230VAC 110VAC 110VDC	☐ METER	□s □x
SR500E24	☐ 230VAC ☐ 110VAC ☐ 110VDC	METER	□s □x
SR500E36	☐ 230VAC ☐ 110VAC ☐ 110VDC	METER	□s □x
SR500E48	☐ 230VAC ☐ 110VAC ☐ 110VDC	METER	□ s □ x
SR500E72*	☐ 230VAC ☐ 110VAC ☐ 110VDC	METER	□ s □ x
SR500E91 *	☐ 230VAC ☐ 110VAC ☐ 110VDC	METER	□ s □ x
SR500E92 *	☐ 230VAC ☐ 110VAC ☐ 110VDC	METER	□ s □ x
SR500E93 *	☐ 230VAC ☐ 110VAC ☐ 110VDC	METER	□s□x

MODEL	INPUT VOLTAGE	VOLT/AMP METER	OUTPUT CONNECTOR	
SR750E12	230VAC 110VAC 110VDC	☐ METER	□s □x	
SR750E24	☐ 230VAC ☐ 110VAC ☐ 110VDC	☐ METER	□s□x	
SR750E36	230VAC 110VAC 110VDC	☐ METER	□s □x	
SR750E48	☐ 230VAC ☐ 110VAC ☐ 110VDC	☐ METER	□s □x	
SR750E72*	☐ 230VAC ☐ 110VAC ☐ 110VDC	☐ METER	□s □x	
SR750E91 *	230VAC 110VAC 110VDC	■ METER	□s □x	
SR750E92 *	230VAC 110VAC 110VDC	METER	□s □x	
SR750E93 *	☐ 230VAC ☐ 110VAC ☐ 110VDC	☐ METER	□s □x	