

SMARTCHARGER 100W



FEATURES AND BENEFITS

- Fully automatic operation
- Designed to industrial standards
- Automatic temperature compensation
- Indefinite short circuit protection
- Operating state and fault indication
- Non-destructive reverse polarity protection
- Can safely be left permanently connected to battery, will maintain 'float' charge
- Fully programmable microprocessor control
- ISO9001 Design management system
- 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

ELECTRICAL			
Innut	STANDARD: 180V - 264VAC		
input	OPTIONAL: 88V - 132VAC		
Frecuency	45-65Hz		
Fusing	Internal AC input fuse		
Isolation	1KV DC input - output / earth		
Efficiency	> 85%		
Inrush current	<30A, 1.8ms		
Output power	100W		
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: $-4mV / °C / cell \pm 10\%$		
Current Limit	Straight line current limit profile (output side)		
Output Protection	Automatic shutdown if battery leads reversed or short circuit on output		
Line regulation	<0.04% over input range		
Load regulation	<0.5% open circuit to 100% load		
Noise	<0.3%		
Transient response	200mV over / undershoot, load step 20-100%, 400us settling time		
Hold-up time	15 - 20 ms (nom max. Vin) without battery		
MECHANICAL			
AC Input Connector	IEC320 inlet socket (power cord supplied)		
DC Output Connection	Plug-in style socket & mating screw terminal block: (max. wire 2.5mm ² / way)		
Enclosure	Zinc plated steel/powder coated lid		
Dimensions	146.5 W x 62 H x 177 D mm		
Weight	0.94Kg		
Mounting	Brackets for permanent fixture.		

FEATURES					
LED Indication	BOOST: Red				
	FLOAT: Green				
Factory Programmable parame-	Start up in boost mode (Boost)				
brackets; please note that some	Current terminated boost (Yes)				
parameters are interdependent of each other)	Current initiated boost (Yes)				
	Start in boost on mains return (Yes)				
	Pre-boost state timer (1 minute)				
	Max boost charge time (24 hours)				
	Pre-float state timer (1 minute)				
	Resume prior state upon mains return timer (10 minutes)				
	Resume on boost charge upon mains return (24 hours)				
	Delay before mains fail recognition (5 mins)				
ENVIRONMENTAL					
Operating temperature	Standard: 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	Natural convection				
STANDARDS					
Emi	To CISPR 22 / EN55022 class A				
Safety	To IEC950 / EN60950 / AS/NZS3260				
ELECTRICAL OPTIONS					
Alarms	Not available with this model				
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				

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SR100B TABLE

MODELS	Output Voltage ¹ (float)	Output Voltage ¹ (max boost)	Output Current (continuous)	Min - Max Battery Size ²
SR100B12	13.8	14.7	6.7A	24 - 70 Ah
SR100B24	27.6	29.4	3.3A	12 - 40 Ah
SR100B36	41.4	44.1	2.2A	9 - 25 Ah
SR100B48	55.2	58.8	1.7A	6 - 20 Ah
		¹ May be adjusted to suit battery sp ² Check manufacturer's recommendation	pecifications endations	

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

MODEL CODING AND SELECTION CHART

MODEL	INPUT VOLTAGE	OUTPUT CONECTOR
SR100B12	230VAC 110VAC 110VDC	🗆 s 🖂 x
SR100B24	230VAC 110VAC 110VDC	□s □x
SR100B36	230VAC 110VAC 110VDC	□s □x
SR100B48	230VAC 110VAC 110VDC	□s □x

S: Stud X: Phoenix combicon (plug in screw t.b)

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