



Charger

- Battery detection - regular battery presence and battery circuit integrity checks
- Deep discharge protection for battery
- Battery circuit overload & short circuit protection
- Automatic temperature compensated output
- Automatic or manually controlled battery condition test (BCT)
- LED flash codes for precise state indication
- Alarm relay outputs
- Adjustable charge current limit
- Reverse battery polarity protection
- For use with external lead acid batteries
- Optional second DC output -#

Communication interfaces

- Ethernet
- RS485
- RS232

◆ 24 Month Warranty



Protocols

- SNMP
- Modbus RTU, TCP/HTTP (using external protocol converter)
- Innovative Energies ASCII code

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

ELECTRICAL		No-Break™ FUNCTIONS AND ALARMS	
Input voltage	230VAC(180-265) 45-65Hz 115VAC (88- 32) 45-65Hz	Battery charge current limit	100% of PSU rated current unless specified on ordering
Fusing / protection	Input fuse & varistor Output fuse & ECB for battery circuit	Reverse polarity protection	Battery reverse connection will open internal fuse (and produce alarm)
Isolation	1KV DC input - output / earth	Battery monitoring	Detects for presence of battery on start up, then every 60 minutes when charge current < 200mA
Efficiency	≥ 85%	Battery circuit protection	Electronic circuit breaker (ECB) operates under the following conditions:
Inrush current	<30A, 1.8ms	- low battery volts	<ul style="list-style-type: none"> • battery voltage drops to 1.67V/cell - auto reset on power on
Output power	100W	- overload	<ul style="list-style-type: none"> • < 300ms for I bat > 6 x I PSU rated , allows ~1.5x rated PSU current from battery without acting,
Output voltage	13.8, 27.6, 34.5, 41.4, 55.2VDC	- short circuit	<ul style="list-style-type: none"> • < 2ms, backed up by fuse
Voltage adj. range	85 - 105% of Vout	LED indication	Green: Power OK Green: Battery OK
Temp. compensation	Temperature sensor on 1.7m lead with adhesive pad: -4mV / °C / cell ±10%	Alarms	<ul style="list-style-type: none"> • Power OK (Mains/PSU fail) • Battery System OK - alarms when battery voltage low (on mains fail) , battery missing, battery circuit wiring faulty, BCT fail (if enabled)
Current Limit	PSU: 100% rated current Battery: 25-100% PSU current	Alarm relay contacts	C - NO - NC full changeover rated 30VDC,2A /110VDC,0.3A/125VAC,0.5A
Line regulation	<0.04% over AC input range	Battery condition test (BCT)	Standard on SR100 i versions BCT relay contact provided to control an external test load.
Load regulation	<0.5% open circuit to 100% load		
Noise	<0.3%		
Transient response	200mV over / undershoot, load step 20-100%, 400us settling time		
Thermal protection	Yes, self-resetting		
Hold-up time	15 - 20 ms (nom. - max. Vin) without battery		
STANDARDS		PHYSICAL	
EMI	to CISPR 22 / EN55022 class A, C-tick compliance	Dimensions	147W x 177D x 62H mm
Safety	to IEC950 / EN60950 / AS/NZS3260	Weight	0.95 Kg

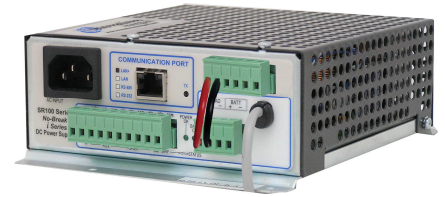
30/11/2016

100 Watt No-Break™ DC charger for lead acid batteries

SR100i

STANDARD MODEL TABLE

MODELS	DC Output				
	Output (V)	PSU Rated (A)	Charge Limit (A) *1	Recomm. Load (A)	Peak load on power fail (A)
SR100i12	13.8	7.5	7.5	6.0	11
SR100i24	27.6	3.7	3.7	3.0	5.5
SR100i30	34.5	2.9	2.9	2.3	4.3
SR100i36	41.4	2.4	2.4	1.9	3.6
SR100i48	55.2	1.9	1.9	1.5	2.8



ENVIRONMENTAL

Operating temperature	0 - 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

ACCESSORIES SUPPLIED

Mounting feet together with screws
AC power cord 1.5m with IEC320 socket & AUS/NZ plug
Mating screw terminal plug for DC output
Mating screw terminal plug for alarms

OPTIONS

Battery Condition Test Add option **SFMCCT xxxxx** for SR100C. Default setting 20mins/28 days.

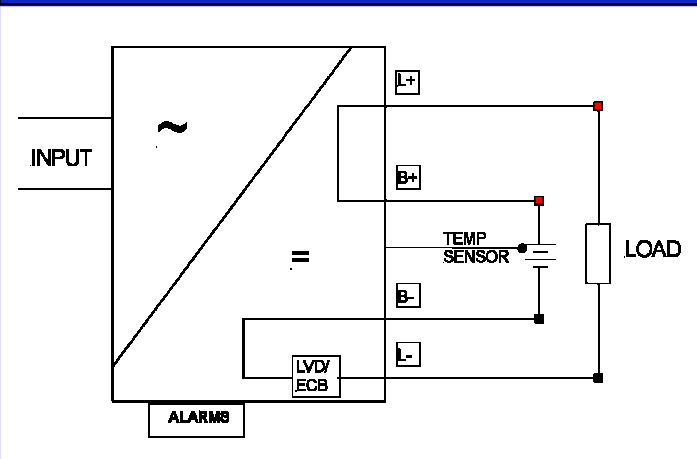
SR100i : default setting is scheduled BCT disabled at start up

Communication Port for -i & V versions Choice of RS485, RS232, LAN+ (SNMP), LAN (ASCII)

Modbus converter For **SR100i ... 485**, use protocol converter, with programming port for PC. **Power MBLink** setup software supplied.
add **+PROTOCONMB** or
add **+PROTOCONMB-OE** with ethernet port

*1 **Charge current limit** 25% & 50% settings available

SCHEMATIC BLOCK DIAGRAM



CABINET OPTIONS

19" Rack Mount 2U sub rack option: add **SR-RM2U**
Optional V/I meter for subrack: **SR-METER**

Wall Mount Enclosure PSU may be fitted into enclosure with MCBs and terminals: add **SEC-SR**

MODEL CODING AND SELECTION CHART

SR100i 12 T X G-LAN+

