



- High performance **No-Break™** DC UPS system
- Separate outputs for load and battery
- Battery detection - regular battery presence and battery circuit integrity checks
- Battery deep discharge protection
- ECB for battery overload & short circuit protection
- Fused reverse battery polarity protection
- Automatic temperature compensated output volts
- Low battery voltage alarm on mains fail
- Power (mains fail) alarm
- No transition switching to backup battery
- LED flash codes for precise fault indication
- High efficiency switch mode design
- Suitable for use with all types of lead acid batteries (batteries external to power supply)

Options:

- battery condition test
- communication interface port, SR100i

Optional Modbus converter for use with SR100i - 485 versions

◆ 24 Month Warranty

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

ELECTRICAL	
Input Voltages	
▪ standard	180V - 264VAC 45-65Hz
▪ optional	88V - 132VAC 45-65Hz
Fusing / Protection	Input fuse Output fuse & ECB for battery
Isolation	1KV DC input - output / earth
Efficiency	≥ 85%
Inrush current	<30A, 1.8ms
Output Power	100W
Output Voltages	13.8V, 27.6V, 34.5, 41.4V, 55.2V
Voltage adj. range	85 - 105% of Vout
Temp. Compensation	Temperature sensor on 1.7m lead with adhesive pad: -4mV / °C / cell ±10%
Current Limit	PSU: 100% rated current Battery: 25-100% PSU current
Line Regulation	<0.04% over AC 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
Thermal Protection	Yes, self-resetting
Hold-up time	15 - 20 ms (nom. - max. Vin) without battery

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

No-Break™ FUNCTIONS AND ALARMS	
Battery Charge Current Limit	100% of PSU rated current unless specified on ordering
Reverse Polarity	Battery reverse connection will open internal fuse (and produce alarm)
Battery Monitoring	Detects for presence of battery on start up, then every 60 minutes when charge current < 200mA
Battery Protection	Electronic Circuit Breaker (ECB) operates under the following conditions:
- low battery volts	• battery voltage drops to 1.67V/cell - auto reset
- overload	• < 300ms for load > 6 x rated PSU current, allows ~1.5x rated PSU current from battery without acting,
- short circuit	• < 2ms, backed up by fuse
LED Indication	Green: Power OK Green: Battery OK
Alarms	• 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)
Alarm relay contacts	C - NO - NC full changeover rated 30VDC,2A /110VDC,0.3A/125VAC,0.5A
Battery Condition Test (BCT)	Standard on SR100i

PHYSICAL	
AC Input connector	IEC320 input socket (similar to PCs etc.)
DC Connections	Plug-in style socket & mating screw terminal block: (max. wire 2.5mm² / way)
Alarm Connections	Plug in screw terminal block
Enclosure	Zinc plated & powder coated steel
Dimensions	147W x 177D x 62H mm
Weight	0.95 Kg

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

SR100C

incl. SR100i

STANDARD MODEL TABLE

MODELS	DC Output				
	Output (V)	PSU Rated (A)	Charge Limit (A) *1	Recomm. Load (A)	Peak load (A)
SR100C12	13.8	7.5	7.5	6.0	11
SR100C24	27.6	3.7	3.7	3.0	5.5
SR100C30	34.5	2.9	2.9	2.3	4.3
SR100C36	41.4	2.4	2.4	1.9	3.6
SR100C48	55.2	1.9	1.9	1.5	2.8



SR100i with RS485 serial port

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

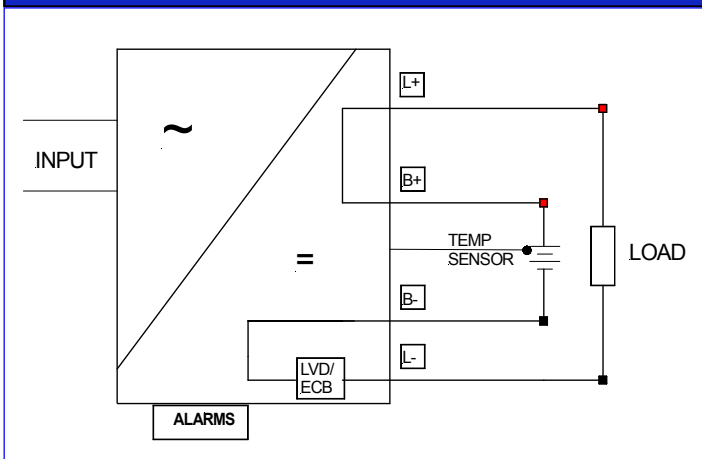
ACCESSORIES SUPPLIED

Mounting feet incl. screws
AC power cord 1.5m with IEC320 socket & AUS/NZ plug
DC connector with mating screw-terminal plug
Alarm connector with mating screw-terminal plug

OPTIONS

Battery Condition Test (standard on SR100i)	Add option SFMC xxxxx on SR100C. Length & duration to be specified.
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 with ethernet port: add +PROTOCONMB-OE
*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

SR100C 12 T X G-485

Optional Communications Interface Port

For SR100i versions:
485 = RS485 232 = RS232 LAN = Ethernet (ASCII)
LAN+ = Ethernet (SNMP)

Input voltage:	230V AC = blank 110V AC = G
Phoenix combicon plug-in/ screw terminal block	
Temperature Compensation:	Yes = T No = blank
DC output: Nominal battery voltage:	12, 24, 30, 36, 48
Function	C = No-Break™ i = No-Break™ + interface
Power	100W

