



Optional internal V/I meter shown

Battery condition test function available

◆ 24 Month Warranty

- High performance **No-Break™** DC UPS system
- Separate outputs for load and battery
- Battery detection - regular battery presence and battery circuit integrity checks
- Deep discharge protection for battery
- Independent charge current limit
- ECB for battery overload & short circuit protection
- Fused reverse battery polarity protection
- Automatic temperature compensated output volts
- High efficiency switch mode design
- No transition switching between PSU & battery
- LED flash codes for precise state indication
- Two alarm relay outputs standard
- Optional communication interface allows remote monitoring & user control of BCT function - *i* versions

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	230V AC: 180V - 264V (standard) 110V AC: 88V - 132V (on request)	Battery charge limit	See Model Table for default settings - may be increased to PSU rated current
Frequency	45- 65 Hz	Reverse polarity protection	Battery reverse connection will open internal fuse (and produce alarm)
Fusing / protection	Input fuse plus varistor Output fuse & ECB for battery circuit	Battery monitoring	Detects for presence of battery on start up, then every 60 minutes when charge current < 200mA
Isolation	1KV DC input - output / earth	Battery protection	Electronic circuit breaker (ECB) operates under the following conditions:
Efficiency	≥ 85%	- low battery volts	• battery voltage drops to 1.67V/cell - auto reset
Inrush current	Soft start circuit	- overload	• < 300ms for load > 6 x rated PSU current, allows ~1.5x rated PSU current from battery without acting,
Output power	500W	- short circuit	• < 2ms, backed up by fuse
Output voltage	13.8, 27.6, 34.5, 41.4, 55.2VDC	Indication LEDs	Green: Battery System OK, Power OK Red: Standby
Voltage adj. range	85 - 105% of Vout	Alarms	• Power OK (Mains/PSU fail, standby mode) • Battery System OK - alarms when battery voltage low (on mains fail), battery missing, battery circuit wiring faulty, BCT fail (if enabled)
Temp. compensation	Temperature sensor on 1.7m lead with adhesive pad: -4mV / °C / cell ±10%	Alarm relay contacts	C - NO - NC full changeover rated 1A /50V DC, 32VAC
Current limits	PSU: 100% rated current Battery: 25-100% PSU current	Standby mode	Turns off DC output of PSU & allows load to run off battery
Line regulation	<0.2% over AC input range	Battery condition test (BCT)	Enabled or disabled by user on SR500i - (20mins/28days). Optional for SR500C . BCT relay provided to control an external test load.
Load regulation	<0.4% open circuit to 100% load	ENVIRONMENTAL	
Noise	<1%	Operating temperature	0 to 50 °C ambient at full load De-rate linearly at >50 °C to no load @ 70 °C
Drift	0.03% / °C	Storage temperature	-10 to 85 °C ambient
Hold-up time	20 ms without battery (nominal - max. Vin)	Humidity	0 - 95% relative humidity non-condensing
Turn on time	< 2 sec	Cooling	Fan cooled
Thermal protection	Yes, self resetting	Protection	IP20
OVP	Over-voltage protection on output at ~ 130% of nominal output voltage		
EMI	to CISPR 22 / EN55022 class A		
Safety	to IEC950 / EN60950 / AS/NZS3260		
Vibration	Designed to meet MIL-STD-810F Method 514.5		

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

SR500C

incl. SR500i

STANDARD MODEL TABLE

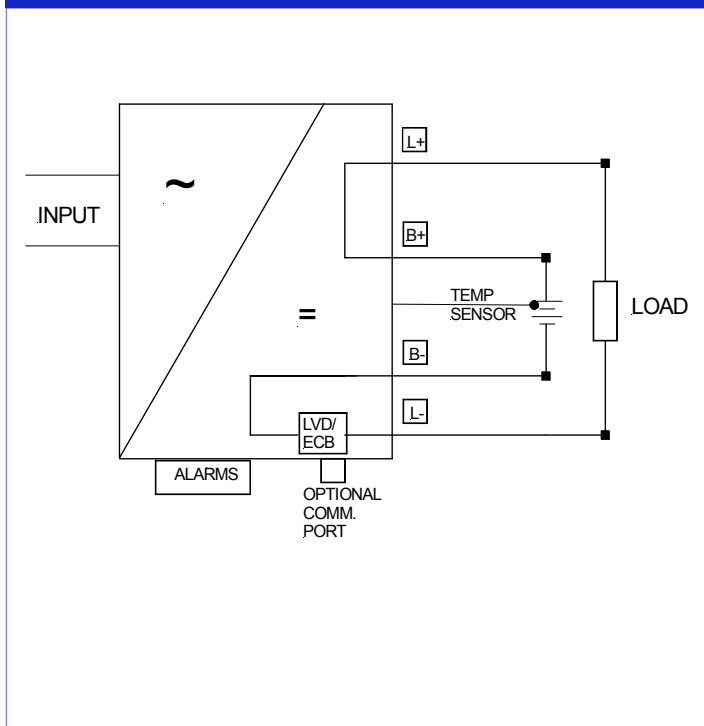
MODELS	DC Output				
	Output (V)	PSU Rated (A)	Charge Limit (A) *1	Recomm. Load (A)	Peak load on input fail (A)
SR500C12	13.8	36	9	27	54
SR500C24	27.6	18	6	12	27
SR500C30	34.5	14.5	5.5	10	21.5
SR500C36	41.4	12	5	7	18
SR500C48	55.2	9	4	5	13.5

*1 This is the default setting. Please specify if higher limit reqd. at time of order



Temperature Probe

SCHEMATIC BLOCK DIAGRAM



PHYSICAL

AC Input connector	IEC320 inlet socket (similar to PCs etc.)
DC Output Connections	M8 brass stud or 'Phoenix combicon' plug-in/ screw terminal block
Alarm Connections	Plug in/ screw terminal block
Enclosure	Powder coated steel
Weight	4.3kg
Dimensions	225W x 304D x 70H mm (excluding mounting feet and terminals)

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. Code: SEC-SR
Parallel redundancy	Use external output diode, eg +P50 . Please refer to separate application notes.
Battery condition test (BCT)	SR500C: Add option code SFMCCT xxxxx , please specify duration & frequency. SR500i: Fit BCT jumper so that BCT is automatically enabled on start up
Internal Digital V/I Meter	Add code +INT-METER
Communications Port (SR500i...)	Choice of RS485, RS232, ethernet (SNMP or ASCII)

ACCESSORIES SUPPLIED

Mounting feet together with screws
AC power cord 1.5m with IEC320 socket & AUS/NZ plug
Mating screw terminal plug for 'X' version
Mating screw terminal plug for alarm outputs
Crimp lugs for 'S' versions

MODEL IDENTIFICATION CODES

SR500C 12 T F S L-LAN

