



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

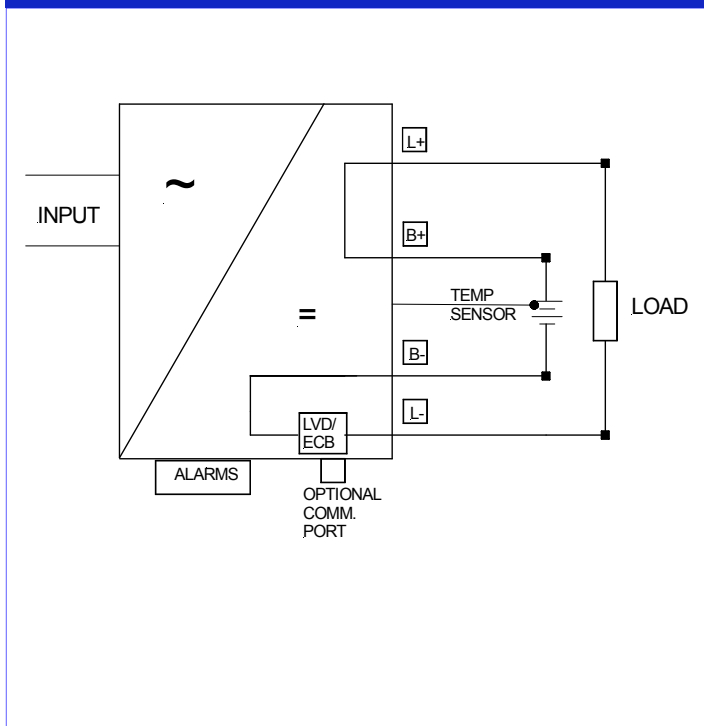
MODELS	DC Output				
	Output (V)	PSU Rated (A)	Charge Limit (A) *1	Recomm. Load (A)	Peak load on input fail (A)
SR500C12	13.8	36	9	27	54
SR500C24	27.6	18	6	12	27
SR500C30	34.5	14.5	5.5	10	21.5
SR500C36	41.4	12	5	7	18
SR500C48	55.2	9	4	5	13.5

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



Temperature Probe

## SCHEMATIC BLOCK DIAGRAM



## PHYSICAL

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

## OPTIONS

<b>19" Rack Mount</b>	2U sub rack option: add <b>SR-RM2U</b> Optional V/I meter for subrack: <b>SR-METER</b>
<b>Wall Mount Enclosure</b>	PSU may be fitted into enclosure with MCBs and terminals. <b>Code: SEC-SR</b>
<b>Parallel redundancy</b>	Use external output diode, eg <b>+P50</b> . Please refer to separate application notes.
<b>Battery condition test (BCT)</b>	<b>SR500C:</b> Add option code <b>SFMCCT xxxxx</b> , please specify duration & frequency. <b>SR500i:</b> Fit BCT jumper so that BCT is automatically enabled on start up
<b>Internal Digital V/I Meter</b>	Add code <b>+INT-METER</b>
<b>Communications Port (SR500i...)</b>	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

