



Optional internal V/I meter shown

- High performance **DC UPS system**
- **No-Break** switching between charger & battery
- **Battery detection - regular battery presence and battery circuit integrity checks**
- **Alarm relay outputs**
- **LED flash codes for precise state indication**
- **Deep discharge protection for batteries**
- **ECB for battery overload & short circuit protection**
- **Fused reverse battery polarity protection**
- **Automatic temperature compensated output volts**
- **Option - battery condition test (BCT)**
- **Option - communication interface allows remote monitoring & user control of BCT function - i versions**
- **Batteries are external to the charger**



Z367

◆ 24 Month Warranty

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

| ELECTRICAL | |
|----------------------------|---------------------------------------------------------------------------------------|
| Input voltage | 230V AC: 180V - 264V (standard) 110V AC: 88V - 132V (on request) |
| Frequency | 50/60 Hz |
| Fusing / protection | Input fuse plus varistor Battery fuse plus ECB for battery circuit |
| Isolation | 1KV DC input - output / earth |
| Efficiency | ≥ 85% |
| Inrush current | Soft start circuit |
| Output power | 500W |
| Output voltage | 13.8, 27.6, 34.5, 41.4, 55.2VDC |
| Voltage adj. range | 85 - 105% of Vout |
| Temp. compensation | Temperature sensor on 1.7m lead with adhesive pad: -4mV / °C / cell ±10% |
| Current limits | PSU: 100% rated current Battery: 25-100% rated current (factory set) |
| Line regulation | <0.2% over AC input range |
| Load regulation | <0.4% open circuit to 100% load |
| Noise | <1% |
| Drift | 0.03% / °C |
| Hold-up time | 20 ms without battery (nominal - max. Vin) |
| Turn on time | < 2 sec |
| Thermal protection | Yes, self resetting |
| 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 |

| No-Break™ FUNCTIONS AND ALARMS | |
|-------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Reverse polarity protection | 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 | <ul style="list-style-type: none"> • battery voltage drops to 1.67V/cell - auto reset |
| - overload | <ul style="list-style-type: none"> • < 300ms for load > 6 x rated PSU current, allows ~1.5x rated PSU current from battery without acting, |
| - short circuit | <ul style="list-style-type: none"> • < 2ms, backed up by fuse |
| Indication LEDs | Green: Battery System OK, Power OK Red: Standby |
| Alarms | <ul style="list-style-type: none"> • Power OK (alarm on mains 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 1A /50V DC, 32VAC |
| Standby mode | Turns off DC output of PSU & allows load to run off battery |
| 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. |

| ENVIRONMENTAL | |
|------------------------------|-------------------------------------------------------------------------------|
| Operating temperature | 0 to 50 °C ambient at full load De-rate linearly at >50 °C to zero @ 70 °C |
| Storage temperature | -10 to 85 °C ambient |
| Humidity | 0 - 95% relative humidity non-condensing |
| Cooling | Fan cooled |
| Protection | IP20 |

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

SR500C

incl. SR500i

STANDARD MODEL TABLE

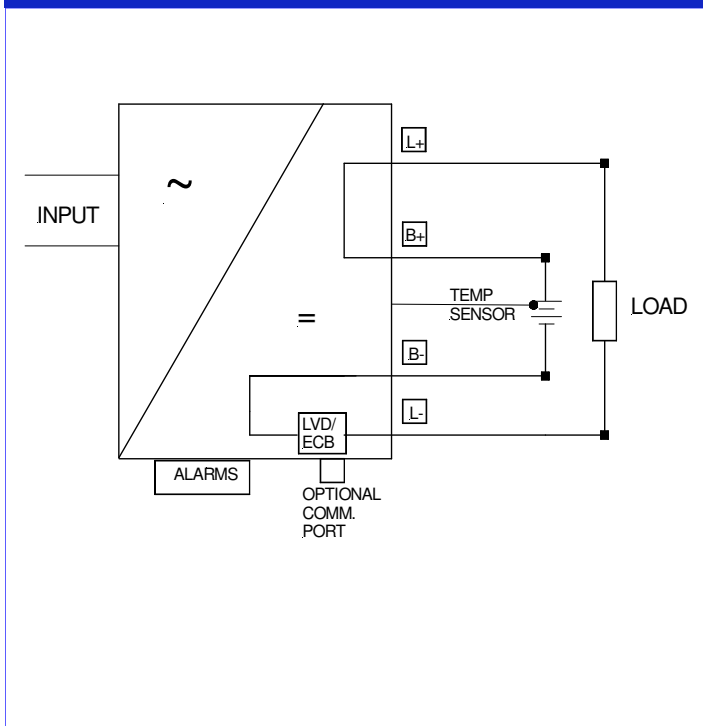
| MODELS | DC Output | | | | |
|----------|------------|---------------|---------------------|------------------|-----------------------------|
| | Output (V) | PSU Rated (A) | Charge Limit (A) *1 | Recomm. Load (A) | Peak load on mains fail (A) |
| SR500C12 | 13.8 | 36 | 36 | 27 | 54 |
| SR500C24 | 27.6 | 18 | 18 | 13 | 27 |
| SR500C30 | 34.5 | 14.5 | 14.5 | 10 | 21.5 |
| SR500C36 | 41.4 | 12 | 12 | 9 | 18 |
| SR500C48 | 55.2 | 9 | 9 | 7 | 13.5 |

*1 This is the default setting. Please specify if a lower limit is required 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 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 |
| Digital V/I meter | May be fitted with SR500 in 19" rack, add: SR-METER or SR-METERV2/SHUNT |
| Wall Mount Enclosure | Charger may be fitted into enclosure with MCBs and terminals. Code: SEC-SR |
| Parallel redundancy | Use external output diode, eg +P50 |
| Internal V/I Meter | Add code +INT-METER |
| Communications Port (SR500i...) | Choice of RS485, RS232, Ethernet |
| Protocols | <ul style="list-style-type: none"> • SNMP v1 • Modbus (external converter) Serial: add +PROTOCONMB TCP & HTTP: add +PROTOCONMB-OE |

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+

