



- 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

◆ 24 Month Warranty



Z367

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

ELECTRICAL	
Input voltage	180 - 264V, 50/60 Hz (standard) or 88 - 132VAC (internal link selectable)
Fusing / protection	5A 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	250W
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 limit	<b>PSU:</b> 100% rated current <b>Battery:</b> 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	< 1 sec
Thermal protection	Yes, self-resetting
Overvoltage protection	Over-voltage protection on output at ~ 130% of nominal output voltage
EMI	CISPR 22 / EN55022 class A
Safety	IEC950 / EN60950 / AS/NZS3260
Vibration	Designed to meet MIL-STD-810F Method 514.5

No-Break™ FUNCTIONS AND ALARMS	
<b>Reverse polarity protection</b>	Battery reverse connection will open internal fuse (and produce alarm)
<b>Battery monitoring</b>	Detects for presence of battery on start up, then every 60 minutes when charge current < 200mA
<b>Battery protection</b>	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
<b>Indication LEDs</b>	<b>Green:</b> Battery System OK, Power OK <b>Red:</b> Standby
<b>Alarms</b>	• 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)
<b>Alarm relay contacts</b>	C - NO - NC full changeover rated 1A /50V DC, 32VAC
<b>Standby mode</b>	Turns off DC output of PSU & allows load to run off battery
<b>Battery condition test (BCT)</b>	Enabled or disabled by user on <b>SR250i</b> - (20mins/28days). Optional for <b>SR250C</b> . BCT relay provided to control an external test load.

ENVIRONMENTAL	
<b>Operating temperature</b>	-20 to 50 °C ambient at full load De-rate linearly at >50 °C to zero @ 70 °C
<b>Storage temperature</b>	-30 to 85 °C ambient
<b>Humidity</b>	0 - 95% relative humidity non-condensing
<b>Cooling</b>	Natural convection except for 12V model (fan)
<b>Protection</b>	IP20

# 250 Watt No-Break™ DC charger for lead acid batteries

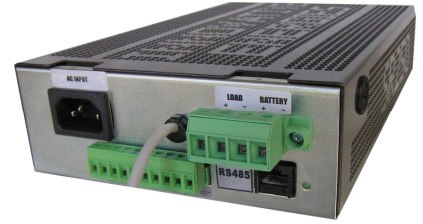
# SR250C

incl. SR250i

## MODEL TABLE (ratings apply to all variants)

MODELS	DC Output				
	Output (V)	PSU Rated (A)	Charge Limit (A) *1	Recomm. Av. Load (A)	Peak load on mains fail (A)
SR250C12	13.8	18.0	18.0	12.0	27
SR250C24	27.6	9.0	9.0	5.0	13.5
SR250C30	34.5	7.2	7.2	3.7	10.8
SR250C36	41.4	6.0	6.0	3.0	9
SR250C48	55.2	4.5	4.5	2.0	6.7

\*1 This is the default setting. Please specify if a lower limit is required at time of order



SR250i (please refer to separate data sheet on comms options)

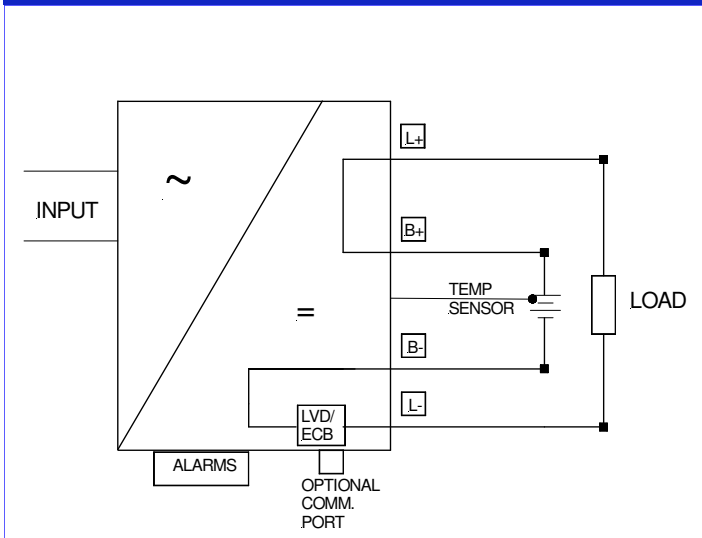
## PHYSICAL DETAILS

AC input connector	IEC320 input socket (included)
DC output connections	M6 brass stud or plug-in style socket & mating screw terminal block:
Alarm connections	Plug in screw terminal block
Enclosure	Powder coated & zinc plated steel
Weight	1.7kg
Dimensions	150W x 242D x 61H mm (excluding mounting feet and connections)

## OPTIONS

Communication port	Choice of RS485, RS232, Ethernet
Protocols	<ul style="list-style-type: none"> <li>SNMP v1</li> <li>Modbus (external converter) Serial: <b>+PROTOCONMB</b> TCP &amp; HTTP: <b>+PROTOCONMB-OE</b></li> </ul>
Digital V/I meter	May be fitted with SR250 in 19" rack, add: <b>SR-METER</b> or <b>SR-METERV2/SHUNT</b>
19" rack mount	Single charger add: <b>SR-RM2U</b> Dual charger (front removable) add: <b>SR-RM2U-DUALV2</b>
Wall Mount Enclosure	Charger may be fitted into enclosure with MCBs and terminals. <b>Code: SEC-SR</b>

## SCHEMATIC BLOCK DIAGRAM



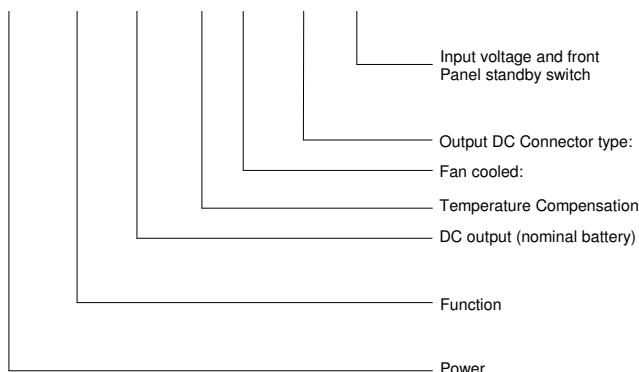
2 x SR250C/i chargers (front removable) in 2U rack

## MODEL IDENTIFICATION CODES

# SR250C12 T F S L- 485

Optional Communications Interface Port

For SR250i versions:  
**485** = RS485    **232** = RS232    **LAN** = Ethernet (ASCII)  
**LAN+** = Ethernet (SNMP)



**L** = 230V AC + switch    **Blank** = 230V AC no switch  
**U** = 110V AC + switch    **G** = 110V AC no switch  
**H** = 110V DC + switch    **J** = 110V DC no switch  
**M** = 230V AC + switch + 300V MOV (to be used with **IEOVPHVAC**)

**S** = Stud    **X** = Plug in /screw terminal block  
**F** = Fan    **Blank** = No fan  
**T** = Yes    **Blank** = No

DC output (nominal battery) **12, 24, 30, 36, 48V**

**C** = **No-Break™** DC PSU/charger  
**i** = **C** with serial or ethernet communications port

Power **250W**