



- High performance **No-Break™** DC UPS system
- Choice of Ethernet/RS485/RS232 output
- Separate outputs for load and battery
- Battery detection - regular battery presence and battery circuit integrity checks
- Deep discharge protection for batteries
- Battery condition test (BCT) automatic or user controlled via comms. port
- Overload, short circuit & reverse polarity protection for battery
- Temperature compensated output
- No transition switching between PSU & battery
- LED flash codes for precise state indication
- “Mains” & “Battery System” alarm relay outputs
- LAN supervision output for Ethernet 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 - 264V, 45-65Hz
▪ optional	88V - 132VAC (internal link select) 88-135VDC (specify at time of order)
Fusing / Protection	Internal input fuse, output battery fuse
Isolation	1KV DC input - output / earth
Efficiency	≥ 85%
Inrush current	Soft start circuit
Output Power	250W continuous (0 - 50°C)
Output Voltages	13.8/ 27.6/ 34.5/ 41.4/ 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	Straight line profile
Line Regulation	<0.2% over AC input range
Load Regulation	<0.4% open circuit to 100% load
Noise	<1% of rated output
Drift	0.03% / °C
Hold-up time	15 - 20 ms (nom. - max. Vin) without battery
Thermal Protection	Automatic current de-rating if >50°C. 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

No-Break™ FUNCTIONS AND ALARMS*

Battery Charge Limit	See Model Table for default settings - may be increased to PSU rated current
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: - battery discharged ELVD (electronic low voltage disconnect) activates when battery voltage drops to 1.67V/cell (adjustable) - auto reset
- overload (*refer to options - ECB)	Allows ~150% load from battery without acting, operates within 300ms for total load > 600%
- short circuit	Acts within 2ms, backed up by fuse
Indication LEDs	Green: Battery System OK, Power OK Red: Standby
Alarms	<ul style="list-style-type: none"> • Mains Fail (Mains or 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)
Alarm Relay contacts	C - NO - NC full changeover rated 1A /50V DC, 32VAC
Battery Condition Test (BCT)	Standard default setting is 20mins/28days BCT may be manually controlled via comms. port.
Standby Mode	Turns off DC output of PSU & allows load to run off battery

ENVIRONMENTAL

Operating temperature	0 - 50 °C ambient at full load De-rate linearly >50 °C to 0 load @ 70 °C
Storage temperature	-10 to 85 °C ambient
Humidity	0 - 95% relative humidity non-condensing
Cooling	Natural Convection except for 12V model

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

SR250i

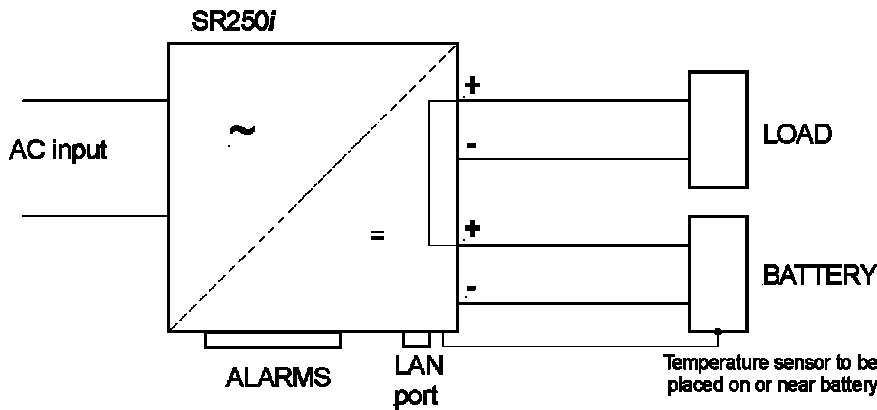
MODEL TABLE					
MODELS	DC Output				
	Output (V) 20degC	PSU Rated (A)	Charge Limit (A) *1	Recomm. Load (A)	Peak load (A) ²
SR250i 12	13.8	18.0	9.0	12.0	27
SR250i 24	27.6	9.0	9.0	5.0	13.5
SR250i 30	34.5	7.2	7.2	3.7	10.8
SR250i 36	41.4	6.0	6.0	3.0	9
SR250i 48	55.2	4.5	4.5	2.0	6.7

*1 Factory default setting unless differently specified at time of ordering

*2 Higher peak loads may be connected directly to the battery and bypassing the internal overcurrent trip circuit

PHYSICAL DETAILS	
AC Input connector	IEC320 input socket (included)
DC Output Connections	M6 brass stud or 'Phoenix combicon' Plug-in style socket & mating screw terminal block:
Alarm Connections	Plug in screw terminal block
Enclosure	Powder coated or zinc plated steel / anodised aluminium
Weight	1.7kg
Dimensions	242 x 150 x 61mm (excluding mounting feet and connections)
19" Rack Mount	2U sub rack option: add SR-RM2U Optional V/I meter for subrack: SR-METER Refer to Rack Mounting Option data sheet for further details.

OPTIONS	
Battery Condition Test	May be enabled or disabled on start up. BCT relay provided to control an external test load or to provide BCT interlock when 2 units are connected for redundancy. Please ask our sales staff for assistance with system design.
Communication Port for i versions	Choice of RS485, RS232, Ethernet
+PROTOCONMB-x	Protocol Converter (MODBUS via RS485) with programming port for PC. Power MBLink setup software supplied. SR250i: -x = blank, x = -OE for Ethernet Port
LVD	Low voltage disconnect level may be customized. Please call us for further information.



MODEL IDENTIFICATION CODES

SR250 i 12 T F S L-LAN+

Communications Interface Port 485 = RS485 232 = RS232 LAN = Ethernet
LAN+ = Ethernet/ SNMP

Input voltage and front panel switches	230V AC + switch = L 230V AC no switch = blank 110V AC + switch = U 110V AC no switch = G 110V DC + switch = H 110V DC no switch = J 230V AC + switch + 300V MOV = M (To be used with IE OVP HV AC)
Output DC Connector type:	Stud = S Plug in screw terminal block = X
Fan cooled:	With fan = F No fan = blank
Temperature Compensation	Yes = T No = blank
DC output: Nominal voltage	12, 24, 30, 36, 48
Function	C = No-Break™ DC PSU/charger, M = C with load output at nominal voltage (eg 24V) i = C with communications port & BCT J = C with LOAD- & BATT- common (Note: no battery detection function)
Power	250W