HELIOS
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SR750C
incl. SR750i

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 external to charger - order separately**

♦ 24 Month Warranty

Z367

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 and varistor Battery fuse plus ECB for battery circuit
Isolation	1KV DC input - output / earth
Efficiency	$\geq$ 85%
Inrush current	Soft start circuit
Output power	750W
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% output voltage
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	• 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
Indication LEDs	**Green:** Battery System OK, Power OK **Red:** Standby
Alarms	• Power OK (mains or charger fail, standby mode) • Battery System OK - 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)	Optional - if enabled, default setting = 20mins/28days). BCT can be started and stopped by the user on SR750 *i*. 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

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

SR750C

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MODEL TABLE

MODEL	DC Output			
	Output (V)	PSU Rated (A)	Charge Limit (A) *1	Peak load on mains fail (A)
SR750C12	13.8	54	27	72
SR750C24	27.6	27	27	36
SR750C30	34.5	21	21	28
SR750C36	41.4	18	18	24
SR750C48	55.2	13.5	13.5	18

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

Stud connectors

SCHEMATIC BLOCK DIAGRAM
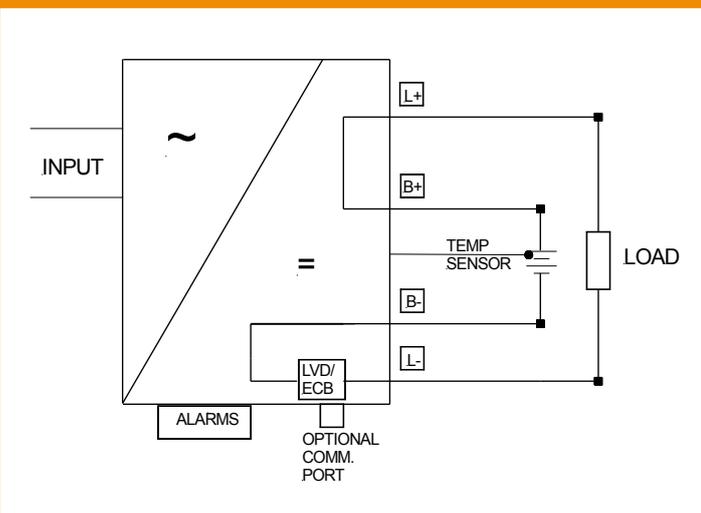
Screw/plug in connectors

OPTIONS

19"Rack Mount	2U sub rack option: add **SR-RM2U**
Digital V/I meter	May be fitted with SR750 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 (SR750*i*...)	● Ethernet / SNMP v1
	● RS485 / Modbus using external converter:
	∗ **+PROTOCONMB** - Modbus serial
	∗ **+PROTOCONMB-OE** - Modbus TCP & HTTP
	● RS232 / IE ASCII code

PHYSICAL

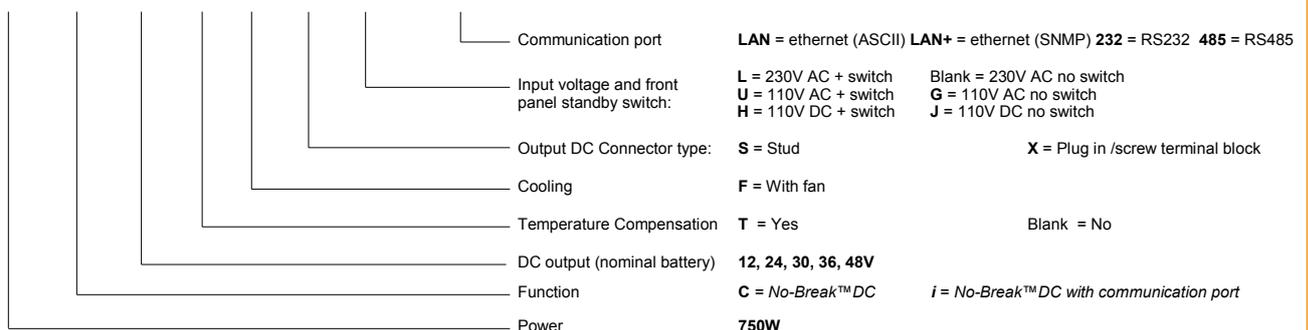|	
AC Input connector	IEC320 inlet socket (similar to PCs etc.)
DC Output Connections	M8 brass stud or plug-in/ screw terminal block
Alarm Connections	Plug in/ screw terminal block
Enclosure	Powder coated steel
Weight	4.3kg
Dimensions	225W x 304D x 70H mm (excluding mounting feet and terminals)

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

SR750C 12 T F S L-LAN+

Communication port	**LAN** = ethernet (ASCII) **LAN+** = ethernet (SNMP) **232** = RS232 **485** = RS485	
Input voltage and front panel standby switch:	**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	
Output DC Connector type:	**S** = Stud	**X** = Plug in /screw terminal block
Cooling	**F** = With fan	
Temperature Compensation	**T** = Yes	Blank = No
DC output (nominal battery)	**12, 24, 30, 36, 48**V	
Function	**C** = *No-Break™DC*	*i* = *No-Break™DC* with communication port
Power	**750W**	

16-02-18