# **SR750C SERIES**

NO Break / DC UPS Charger: 750 Watts



incl. SR750i



- High performance DC UPS system
- No-Break switching between charger & battery
- Battery detection regular battery presence and battery circuit integrity checks (every 60 mins)
- 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

# Optional internal V/I meter shown

# **Specifications**

Input voltage 230V AC: 180V - 264V (standard)

110V AC: 88V - 132V (on request)

50/60 Hz Frequency

Input fuse plus varistor Fusing / protection

Battery fuse plus ECB for battery circuit

Isolation 1KV DC input - output / earth

Efficiency ≥ 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 adhe-

sive 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% / ℃

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

to IEC950 / EN60950 / AS/NZS3260 Safety

Vibration Designed to meet MIL-STD-810F Method

514.5

# No-Break™ FUNCTIONS AND ALARMS

Reverse polarity pro-Battery reverse connection will open internal tection 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

< 300ms for load > 6 x rated PSU cur-- overload rent, allows ~1.5x rated PSU current

- short circuit < 2ms, backed up by fuse

**Indication LEDs** Green: Battery System OK, Power OK

Red: Standby

Power OK (alarm on mains fail) **Alarms** 

Battery System OK - alarms when battery voltage low (on mains fail), battery missing, battery circuit wiring faulty, BCT

from battery without acting,

fail (if enabled)

Alarm relay contacts C - NO - NC full changeover rated 1A /50V

DC, 32VAC

Turns off DC output of PSU & allows load to Standby mode

run off battery

**Battery condition test** 

(BCT)

Enabled or disabled by user on SR750i -(20mins/28days). Optional for SR750C. BCT relay provided to control an external test

load.

## **ENVIRONMENTAL**

Operating 0 to 50 °C ambient at full load temperature 

-10 to 85 °C ambient Storage temperature

0 - 95% relative humidity non-condensing Humidity Cooling Fan cooled

IP20 **Protection** 

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# STANDARD MODEL TABLE

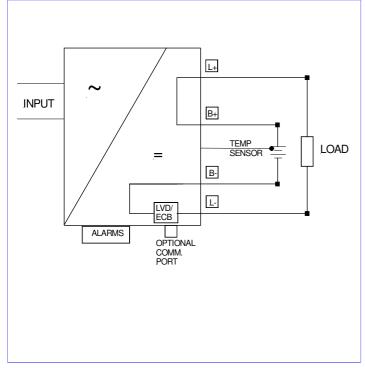
	DC Output				
MODELS	Output (V)	PSU Rated (A)	Charge Limit (A) *1	Recomm. Load (A)	Peak load on mains fail (A)
SR750C12	13.8	54	54	40	81
SR750C24	27.6	27	27	20	40
SR750C30	34.5	21	21	15	31
SR750C36	41.4	18	18	13	27
SR750C48	55.2	13.5	13.5	10	20

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



IFO000 inlet english (similar to BO) at a

# **SCHEMATIC BLOCK DIAGRAM**



# **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

# **PHYSICAL**

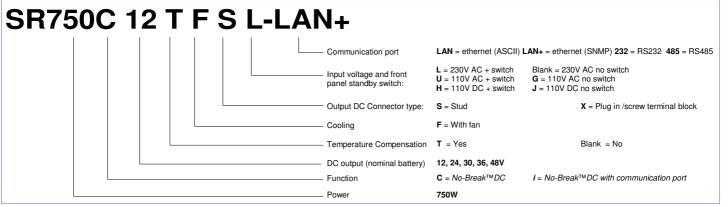
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AC Input connector	IEC320 inlet socket (similar to PCs etc.)
DC Output Connections	M8 brass stud or plug-in/ screw terminal block
Alarm Connections	Plug in/ screw terminal block
Enclosure	Powder coated steel
Weight	4.3kg
Dimensions	225W x 304D x 70H 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 SR750 in 19" rack, add: <b>SR-METER</b> or <b>SR-METERV2/SHUNT</b>		
Wall Mount Enclosure	Charger may be fitted into enclosure with MCBs and terminals. <b>Code: SEC-SR</b>		
Parallel redundancy	Use external output diode, eg +P50		
Internal V/I Meter	Add code +INT-METER		
Communications Port	Choice of RS485, RS232, Ethernet		
(SR750 <i>i</i> ) Protocols	• SNMP v1		
	<ul> <li>Modbus (external converter)</li> <li>Serial: +PROTOCONMB</li> <li>TCP &amp; HTTP: +PROTOCONMB-OE</li> </ul>		

## **MODEL IDENTIFICATION CODES**



# GF!FUW\_SERIES %]b'FUW\_g'Zef'GF'GYf]Yg'6 UthYfm7\ Uf[ Yfg





**Features** 

2U or 3U modules for 19 inch rack system

Alarm options

• Metering options

· Parallel redundancy options

Fully customised solutions

19" rack mounting is available as an option to house any of the SR  $\dots$  range of power supplies, DC/DC converters, etc.

A wide range of options are available with this configuration, such as MCB's for mains or battery, alarms (i.e. battery low, mains fail), metering, parallel redundancy etc.

DC distribution using MCBs is available using our 3U DIST-PANEL.

Codes: SR-RM2U: 2U for SR... products

SR-RM2U-DUAL: 2U for 2 x SR250 ( power supplies are

front removable, rear connectors incl.)

**+RM2U:** 2U for non SR **+RM3U:** 3U for all

#### **POSSIBLE CONFIGURATIONS FOR 2U SUBRACK**

SR100 x 1 or 2

SR250 x 1 or 2

SR500 x 1

SR750 x 1

SR250 + up to 4 x 7 Ah batteries

IEXT up to 4

IEHR up to 2

# The following items may be fitted into our 2U or 3U subracks

MCBs, digital V/I meter, diodes for N+1 redundancy

AC/DC power supplies

DC/DC converters

DC/AC inverters

#### **PHYSICAL**

Internal Dimensions 2U: 409W x 335D x 76H mm

3U: 435W x 355D x 121H mm

Front Panel Dimen- 2U: 484 x 88mm

**sions:** 3U: 484 x 134mm

Plug-in connectors Socket connectors may be fitted on the rear

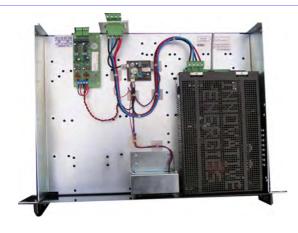
panel for easy connection and disconnection

under no load conditions

Weight 2.8kg / 1.9kg without lid

# **CUSTOM DESIGN**

Innovative Energies specialises in customised configurations; please contact us to discuss your specific requirements.





**SR-RM2U-DUAL:** 2U rack for 2 x SR250P which are front removable (optional V/I meter shown)