SLC TWIN RT2 LION

On-line double conversion tower/rack UPS, 1000-3000 VA, with lithium-ion batteries

SLC TWIN RT2 LION: Maximum protection density

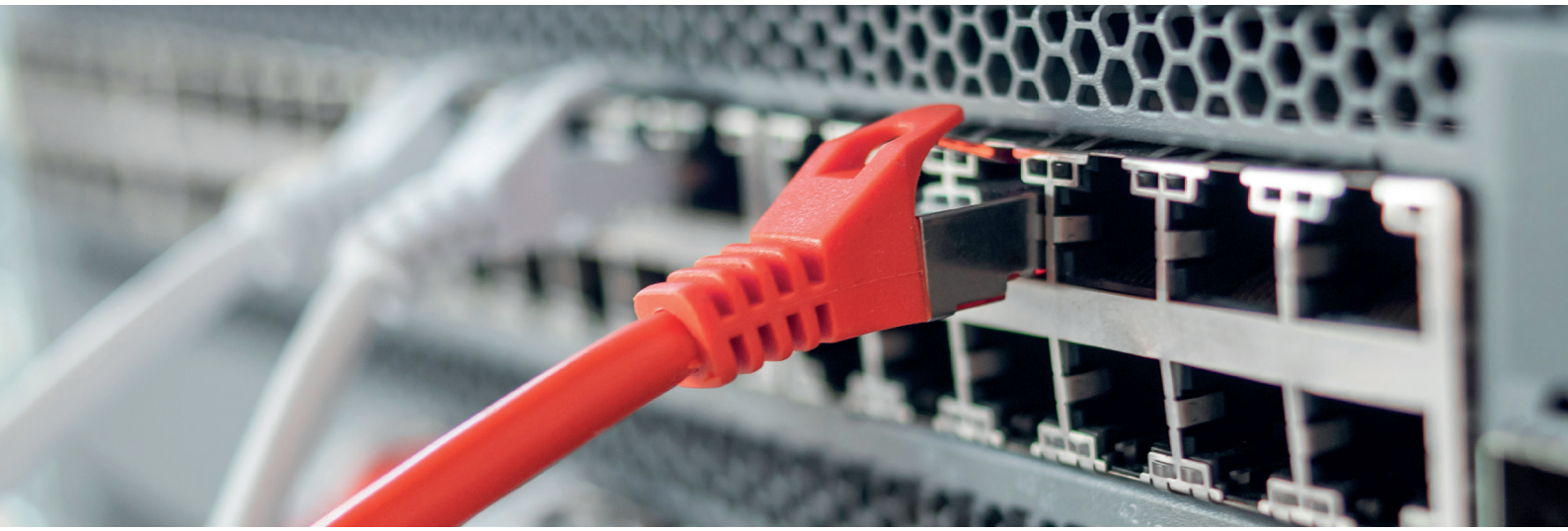
Salicru's **SLC TWIN RT2 LION** series are uninterruptible power supply (UPS) systems that offer the most reliable on-line double conversion technology on the market, with output power factor PF=0.9, a format that adapts to suit any tower/rack environment, lithium-ion batteries and a wide range of options for communication.

The use of lithium-ion batteries as a backup power source has numerous advantages over traditional valve-regulated lead acid (VRLA) batteries: their lifespan is more than double, they can accommodate up to 10 times more discharge cycles, their rate of self-discharge is four times lower, they can maintain their level of performance at high temperatures (40ºC), they offer reduced weight and volume, and they can be recharged up to four times faster (among other advantages).

With regard to TCO, lithium-ion batteries have a longer useful life than the estimated working life of the UPS (10 years), meaning that unlike VRLA batteries, they do not need to be replaced. Consequently, a slightly higher initial investment is converted into a significant saving by the time the system reaches the end of its life.

Applications: Better performance and lower TCO for protecting edge environments

Adaptable to any edge computing environment, Salicru's **SLC TWIN RT2 LION** series offers top-level security in a compact format with a wide range of communication options for IT servers, voice and data networks, video streaming, unified communications, document management and CAD/CAM.



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Performances

· On-line double conversion technology.
· Output power factor PF= 0.9.
· Convertible tower/rack format.
· Control panel with swivel mount LCD display and keypad.
· Includes pedestal (pedestal mount) and lugs (rack mount).
· Lithium-ion batteries with over 2000 discharge cycles.
· RS-232 and USB-HID communication interfaces.
· Downloadable monitoring software for Windows, Linux and Mac.
· Smart slot for SNMP/potential-free contacts/MODBUS.
· ADSL/fax/modem line protection.
· Can operate in Eco Mode.
· Programmable outputs for critical/non-critical loads.
· Frequency conversion function.
· 5-Year warranty.
· SLC Greenergy solution.

Comparison between lithium-ion and valve-regulated lead acid batteries (VRLA)

Parameter	VRLA	Lithium-ion	Advantage
Energy density	Medium	High	Longer range in the same volume
Discharge cycles	200-400	2000	5-10x more discharge cycles available
Weight	Height	60% less	Ease of handling and installation
Useful service life at 25°C	4 years	10 years	2-3x longer lifespan
Battery changes over 10 years	2-3	0	Zero maintenance concerns
Recharge time (90%)	8 hours	2 hours	4x faster recharge time
Max temp. at 100% performance	25° C	40° C	Better adaptation to hostile environments
CapEx (initial investment)	Medium	50% higher	Requires a higher initial outlay
OpEx (installation and running costs)	Height	60% less	Costs less over the product's useful life
TCO after 10 years (total cost)	Medium	40% less	Highly favourable TCO over 10 years

Communications

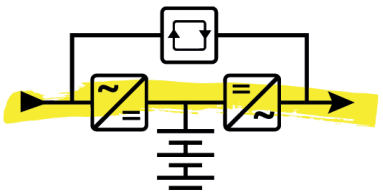
· **USBHID UPS**: Enables control, parameter configuration and computer shutdown/ hibernation via the USB port. Available with Windows, Linux for Mac.
· UPS monitoring and management software for closing files/applications in Windows, Linux, Unix and Mac environments. Free and downloadable from www.salicru.com.
· Intelligent slot for connecting SNMP or optocoupler cards.

Easy to install

Convertible tower/rack thanks to the accessories included (rack handles, tower pedestal), swivel mount display. Intuitive LCD for operation and configuration, with optical and audible warning devices. Easy segmentation of sockets between critical/ non-critical loads.

Online double-conversion

Provides the highest level of security and reliability for protected critical loads, owing to the double conversion between the input and output and from AC to DC and DC to AC, thereby supplying a pure, stable, clean sine-wave voltage at the output, without any outages.



Range

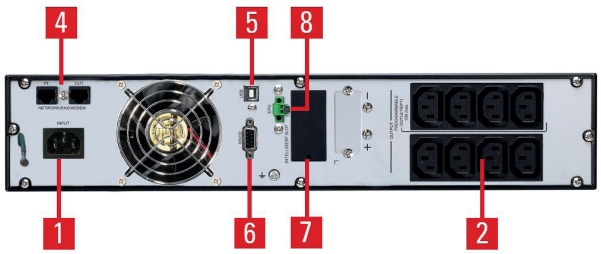
MODEL	CODE	POWER (VA / W)	NO. OF OUTPUT SOCKETS	DIMENSIONS (D × W × H mm)	WEIGHT (Kg)
SLC-1000-TWIN RT2 LION	698LA000001	1000 / 900	8 × IEC C13	410 × 438 × 88	10.8
SLC-1500-TWIN RT2 LION	698LA000002	1500 / 1350	8 × IEC C13	410 × 438 × 88	11.6
SLC-2000-TWIN RT2 LION	698LA000003	2000 / 1800	8 × IEC C13	510 × 438 × 88	15.2
SLC-3000-TWIN RT2 LION	698LA000004	3000 / 2700	8 × IEC C13 + 1 × IEC C19	630 × 438 × 88	20.5

Frontal protuberance, from the fixing plane of the ears on the rack cabinet: 35mm. This distance is not included in the "Depth" total dimension.

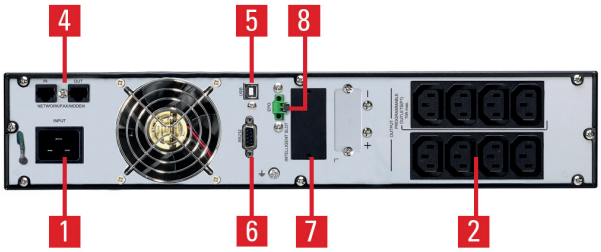
Dimensions

SLC-1000÷3000-TWIN RT2 LION

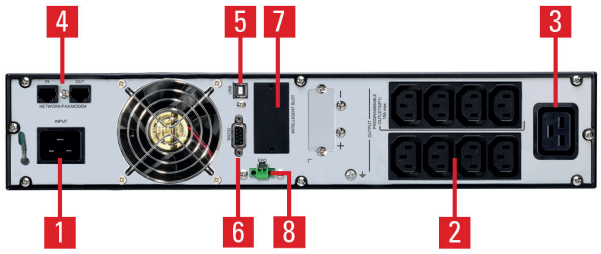
Connections



SLC-1000/1500-TWIN RT2 LION



SLC-2000-TWIN RT2 LION



SLC-3000-TWIN RT2 LION

1. Plug (IEC C14 for 1000 and 1500 VA models; IEC C20 for 2000 and 3000 VA models).
2. Sockets (8 x IEC C13), programmable critical (x4) / non-critical (x4).
3. Socket IEC C19 (only for 3000 VA model).
4. ADSL/fax/modem transient protector.
5. USB interface.
6. RS-232 interface.
7. Smart slot for SNMP/potential-free contacts/ MODBUS.
8. Emergency stop (EPO).

Technical specifications

MODEL		SLC TWIN RT2 LION
TECHNOLOGY		On-line double-conversion
FORMAT		Convertible tower/rack
INPUT	Rated voltage	230 V
	Voltage range	110 ÷ 300 V(1)
	Rated frequency	50 / 60 Hz (auto-detection)
	Frequency range	±10 Hz
	Total harmonic distortion (THDi)	≤5%
OUTPUT	Power factor	0.9
	Rated voltage	200 / 208 / 220 / 230 / 240 V(2)
	Voltage accuracy	±1%
	Total harmonic distortion (THDv)	< 2% linear load / < 4% non-linear load
	Synchronised frequency	±3 Hz
	Free running frequency	±0,1 Hz
	On-line performance	≥90 ÷ 91%
	Eco-mode performance	≥96 ÷ 97%
	Admissible overloads	< 130% for 5 min / < 140% for 30 s / <150 % for 1.5 s / 150 % for 100 ms
	Programmable sockets	Yes, for critical / non-critical loads (4/4)
BYPASS	Rated voltage	230 V
	Frequency range	50/60Hz ±3 Hz
BATTERY	Battery type	LiFePO4
	Charge type	I/U (constant current/constant voltage)
	Recharge time	3 hours to 100%
COMMUNICATION	Ports	USB-HID / RS-232
	Intelligent slot	Slot for SNMP/potential-free contacts/ MODBUS
	Monitoring software	For Windows, Linux and Mac
OTHER FUNCTIONS	Cold start (start-up from batteries)	Yes
	Emergency stop (EPO)	Yes
	ADSL/fax/modem transient protector	Yes
OPERATING MODES	Frequency converter (CVCF)	Yes(3)
GENERAL	Operating temperature	0° C ÷ 40° C
	Relative humidity	Up to 95%, non-condensing
	Maxium operating altitude	2,400 masl (power degradation up to 5,000 m)
	Acoustic noise at 1 metre	50 dB
STANDARDS	Safety	EN-IEC 62040-1
	Electromagnetic compatibility (EMC)	EN 62040-2(C2)
	Operation	EN 62040-3
	Quality and environmental management	ISO 9001 & ISO 14001

(1) Depending on load percentage
(2) 90% power reduction for 200 or 208 V devices
(3) 78% power reduction