

# LiON (S) RT - (XL)RT



## 1 kVA - 3 kVA ON-LINE UPS

High performance single-phase ON-LINE UPS Rack/Tower convertible, with double conversion topology Power Factor = 0.9. LiON (S)RT - (XL)RT are UPS models that use Lithium batteries providing greater autonomy (15 min at full load), long cycle life ( $\geq 2000$  cycle times) and greater performance at high/low temperature. It is the optimum solution with high reliability, high power, and energy density.



1 phase in / 1 phase out

Li-on

### COMPLETE APPLICATION PROTECTION



TELECOM



SERVERS



LIGHT  
INDUSTRY



SECURITY



OFFICE  
COMPUTERS



NAVAL  
ELECTRONICS



MEDICAL  
APPLICATIONS

## FEATURES

- High frequency on-line double conversion technology
- DSP (Digital signal processors) control technology
- Active power factor correction (APFC), input power factor up to 0.99
- Output power factor 0.9
- Wide input voltage range (110 V ~ 300 Vac) and frequency range (40 ~ 70 Hz)
- Auto sensing frequency
- 50 / 60 Hz frequency conversion
- Cold start
- Effective software and hardware protection
- Linear derating in low voltage input reducing battery discharging times
- Fan speed varies intelligently with temperature, reducing noise and extending its service life

- Use lithium battery
  - High reliability, high power and energy density
  - Providing greater autonomy (15 min at full load for standard model UPS)
  - Long cycle life ( $\geq 2000$  cycle times)
  - Greater performance at high/low temperature
- Advanced battery management (ABM)
- Rotatable display panel
- Multi-platform communications: RS232 (standard), USB/RS485/ SNMP/dry contacts (optional)

### AVAILABLE OPTIONS

- Optional USB, RS485 card, AS400 dry contacts, SNMP card, SMS alarms, EPO function, MBS (External maintenance bypass switch)

# LiON (S) RT - (XL)RT



ON-LINE UPS 1 kVA - 3 kVA

MODEL	1101SRTB	1101RTXL	1102SRTB	1102RTXL	1103SRTB	1103RTXL
CODE	UPS.0932	UPS.0885	UPS.0933	UPS.0935	UPS.0934	UPS.0886
Capacity	1 kVA / 900 W		2 kVA / 1800 W		3 kVA / 2700 W	
<b>INPUT</b>						
Rated voltage	208 / 220 / 230 / 240 Vac					
Voltage range	110 ~ 176 Vac (linear derating between 50% and 100% load); 176 ~ 280 Vac (no derating); 280 ~ 300 Vac (derating 50%)					
Frequency range	40 ~ 70 Hz (auto-sensing)					
Power factor	> 0.99					
Bypass voltage range	-25% ~ +15% (settable)					
Total harmonic distortion (THDi)	≤ 6%					
<b>OUTPUT</b>						
Voltage	208 / 220 / 230 / 240 Vac (settable via LCD)					
Voltage regulation	± 1%					
Frequency	45 ~ 55 Hz or 55 ~ 65 Hz (synchronized range); 50 / 60 Hz ± 0.1 Hz (battery mode)					
Waveform	Sinusoidal					
Power factor	0.9					
Total harmonic distortion (THDv)	≤ 2% (linear load); ≤ 5% (non-linear load)					
Crest factor	3:1					
Overload	105% ~ 125% for 1 min, 125% ~ 150% for 30 s, > 150% for 300 ms					
<b>BATTERIES</b>						
Battery type	Lithium iron phosphate Battery					
DC voltage	25.6V	48V	51.2V	48V	76.8V	48V
Inbuilt battery	8×3.2 V / 12 Ah	/	16×3.2 V / 12 Ah	/	24×3.2 V / 12 Ah	/
Charging current (max.)	1 A	6 A	1 A	6 A	1 A	6 A
Recharge time	Standard model: 90% capacity restored in 11 hours; Long time model: depend on the capacity of battery					
<b>SYSTEM</b>						
Efficiency	≥ 90% (Mains mode)		≥ 91% (Mains mode)		≥ 92% (Mains mode)	
	≥ 85% (Battery mode)		≥ 86% (Battery mode)		≥ 87% (Battery mode)	
	≥ 95% (ECO mode)		≥ 96% (ECO mode)		≥ 97% (ECO mode)	
Transfer time	Mains mode to battery mode: 0 ms Inverter mode to bypass mode: 4 ms (typical)					
Protections	Short-circuit, overload, overtemperature, battery discharge protection and fan testing protection					
Communications	RS232 (standard), USB / RS485 / dry contacts / SNMP (optional)					
Display	LCD + LED					
Standards	EN 62040-1, EN 62040-2, EN 61000-3-2, EN 61000-3-3, IEC 61000-4-2, IEC 61000-4-3, IEC 61000-4-4, IEC 61000-4-5, IEC 61000-4-6, IEC 61000-4-8, IEC 61000-4-11, IEC 61000-2-2, IEC 62040-2, IEC 62040-1					
<b>OTHERS</b>						
Operating temperature	0°C ~ 40°C					
Storage temperature	-25°C ~ 55 °C (without batteries)					
Relative humidity	0 ~ 95% (non-condensing)					
Altitude	≤ 1000 m, derating 1% for each additional 100 m					
IP rating	IP 20					
Noise level at 1m	≤ 50 dB					
Dimensions (W × D × H) (mm)	440 × 468 × 88	440 × 468 × 88	440 × 583 × 88	440 × 468 × 88	440 × 683 × 88	440 × 468 × 88
Packaged dimensions (W × D × H) (mm)	545 × 598 × 198	545 × 598 × 198	545 × 707 × 201	545 × 598 × 198	545 × 807 × 201	545 × 598 × 198
Net weight (kg)	10.6	7.6	19	9.7	25	10.6
Gross weight (kg)	13.6	10.6	23	14	29	14.6

• Derate capacity to 70% in CUCF mode and to 90% when the output voltage is adjusted to 208 Vac.

• All specifications are subject to change without notice

• S means standard model, RT means Rack type, B mean inc batteries, XL means long time model.