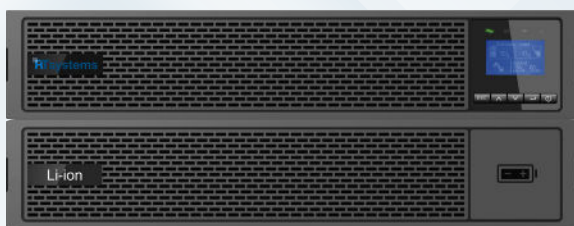
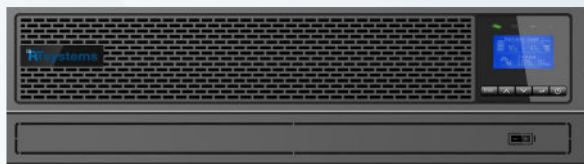


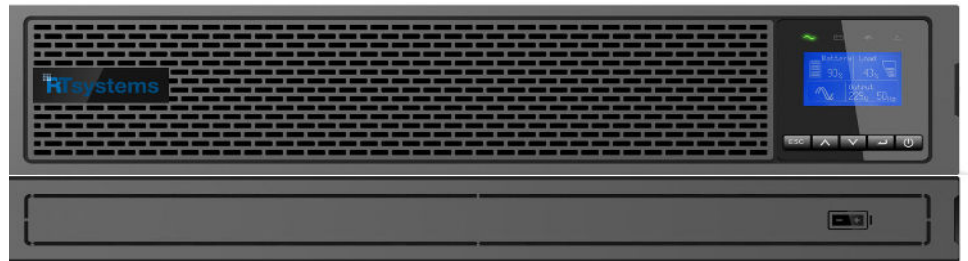
# Uninterruptible Power Supply

RT Systems UPS solutions are designed to protect your critical equipment from power interruptions, surges, and outages. With reliable performance, intelligent monitoring, and scalable options, our UPS range ensures uninterrupted operation and peace of mind across commercial and industrial environments.





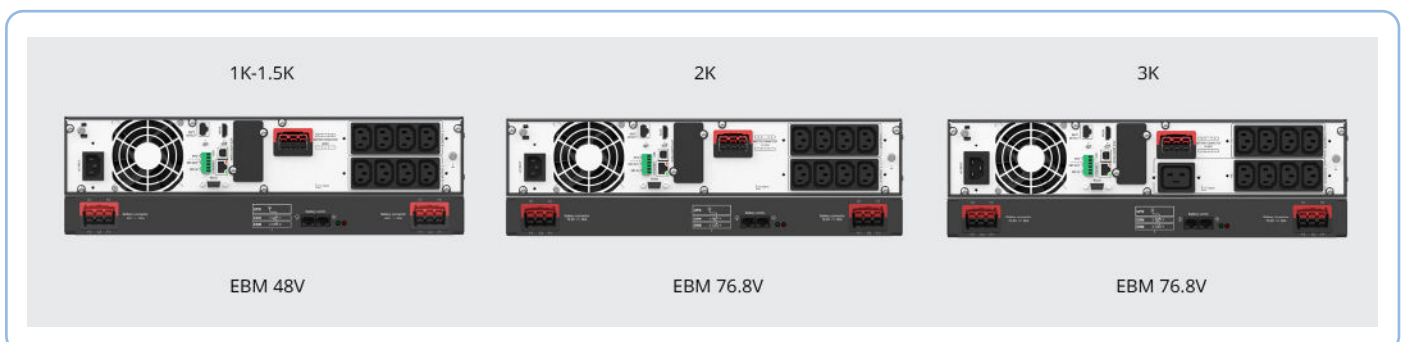
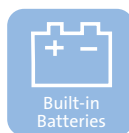
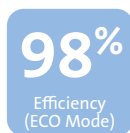
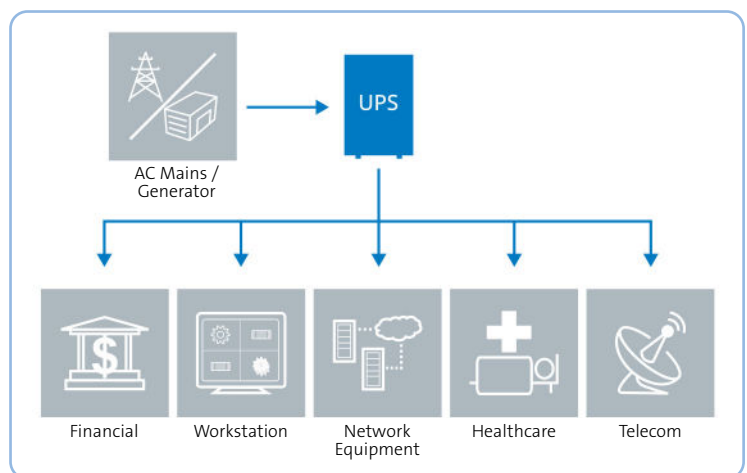
## RT Lithium-Ion 1-3KVA



### KEY FEATURES

- Maximum output power factor is 1, VA=W
- Up to 94% leading efficiency
- Level 3 Built-in lithium battery, synchronisation with UPS (capacity, health, performance and external balancing)
- Extended backup time with up to 4-6 optional EBM's with automatic detection
- Compact design: 2U UPS+ 1U EBM
- Rack/tower dual set-up with rotatable LCD panel
- USB, RS232 port, dry contacts, RPO & ROO connectors, optional SNMP
- Built-in Ethernet port for cloud connection
- Certification: CE, UN38.3, IEC62619, UL1973 (PACK).

### TYPICAL APPLICATION



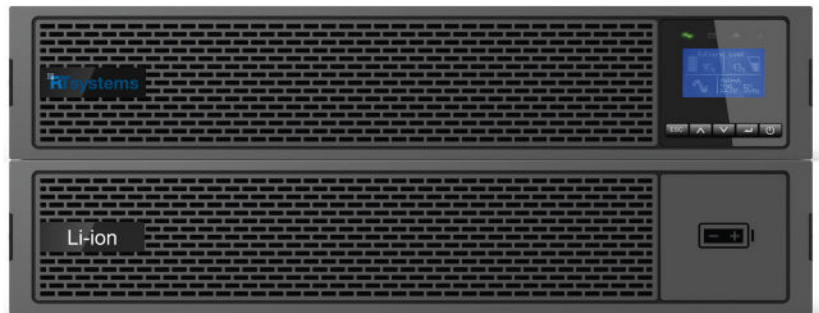
# RT Lithium-Ion 1-3KVA

| Model name            |                        | 1K                                                                                                           | 2K                                                         | 3K                                                                                                           |
|-----------------------|------------------------|--------------------------------------------------------------------------------------------------------------|------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|
| Power rating          | VA/Watt                | 1000VA/1000W                                                                                                 | 2000VA/2000W                                               | 3000VA/3000W                                                                                                 |
| Effiency              | Line mode              | up to 91.3%                                                                                                  | up to 93.8%                                                | up to 94%                                                                                                    |
|                       | ECO mode               | up to 97.1%                                                                                                  | up to 97.8%                                                | up to 98.4%                                                                                                  |
| Input performance     | Voltage range          |                                                                                                              | 160-300V 100% load, 110-160V derating to 50% load linearly |                                                                                                              |
|                       | Rated frequency        |                                                                                                              | 50Hz/60Hz                                                  |                                                                                                              |
|                       | Frequency range        |                                                                                                              | 40Hz-70Hz (45Hz-55Hz, 54Hz-66Hz @ load>60%)                |                                                                                                              |
|                       | PF                     |                                                                                                              | >0.99                                                      |                                                                                                              |
|                       | THDI                   | <5.5%                                                                                                        | <5%                                                        | <5%                                                                                                          |
| Input connection      | Socket (RT)            | 1x IEC C14                                                                                                   |                                                            | 1x IEC C20                                                                                                   |
| Output performance    | Rated voltage          | 200/208/220/230/240 VAC (derating 10% at 208V, derating 20% at 200V)                                         |                                                            |                                                                                                              |
|                       | Rated frequency        | 50Hz/60Hz                                                                                                    |                                                            |                                                                                                              |
|                       | Maximum PF             | PF = 1                                                                                                       |                                                            |                                                                                                              |
|                       | Voltage accuracy       | ±1%                                                                                                          |                                                            |                                                                                                              |
|                       | THDV                   | <1% linear load; <4% nonlinear load                                                                          |                                                            |                                                                                                              |
|                       | Transfer time          | 0ms@line <-> battery; 4ms @ line <-> bypass; 10ms @ ECO <-> Inverter                                         |                                                            |                                                                                                              |
|                       | Crest Ratio            | Max 3:1                                                                                                      |                                                            |                                                                                                              |
|                       | Overload               | 100%<load≤105% continuous , 105%< load ≤125% for 5 minutes<br>125<load≤150% for 30 seconds , >150% for 500ms |                                                            |                                                                                                              |
| Output connection     | Socket                 | 1 main outlet group (with 4 x IEC C13)<br>1 programmable outlet group (with 4 x IEC C13)                     |                                                            | 1 main outlet group<br>(with 1 x IEC C19 + 4 x IEC C13)<br>1 programmable outlet group<br>(with 4 x IEC C13) |
|                       | Load segment control   | 1 programmable load segment control                                                                          |                                                            |                                                                                                              |
| Battery               | Voltage                | 48VDC                                                                                                        | 76.8VDC                                                    | 76.8VDC                                                                                                      |
|                       | Capacity (AH)          | 9Ah/576Wh                                                                                                    | 9Ah/921Wh                                                  | 9Ah/921Wh                                                                                                    |
|                       | Material               | Lithium-Ion (LiFePO4)                                                                                        |                                                            |                                                                                                              |
| Maximum EBM quantity  |                        | 6                                                                                                            |                                                            |                                                                                                              |
| EBM auto detection    |                        | Yes                                                                                                          |                                                            |                                                                                                              |
| Battery Hot swappable |                        | Yes                                                                                                          |                                                            |                                                                                                              |
| Charger               | Charging method        | BMS                                                                                                          |                                                            |                                                                                                              |
|                       | Charging current       | 1.5A                                                                                                         | 1.5A                                                       | 1.5A                                                                                                         |
|                       | Recharging time        | 3.6h to 90%                                                                                                  | 4.6h to 90%                                                | 4.6h to 90%                                                                                                  |
| Other mode            | CVCF                   | Yes (derating to 60% load)                                                                                   |                                                            |                                                                                                              |
| HMI                   | Display                | Dot matrix LCD (optional segment LCD)                                                                        |                                                            |                                                                                                              |
|                       | Language               | Multi-Language                                                                                               |                                                            |                                                                                                              |
|                       | USB                    | USB 2.0 with HID power device                                                                                |                                                            |                                                                                                              |
|                       | RS232                  | Yes (DB9)                                                                                                    |                                                            |                                                                                                              |
|                       | Dry in/out             | 1 programmable dry in; 1 programmable dry out                                                                |                                                            |                                                                                                              |
|                       | RPO                    | Yes                                                                                                          |                                                            |                                                                                                              |
|                       | Intelligent slot       | Yes (for long card)                                                                                          |                                                            |                                                                                                              |
|                       | Network card           | Optional, NMC long card                                                                                      |                                                            |                                                                                                              |
|                       | Modbus card            | Optional, CMC Long Card                                                                                      |                                                            |                                                                                                              |
|                       | Dry contactor card     | Optional, AS400 Long Card                                                                                    |                                                            |                                                                                                              |
|                       | Wireless module        | Optional                                                                                                     |                                                            |                                                                                                              |
|                       | IOT Ethernet port      | RJ45                                                                                                         |                                                            |                                                                                                              |
|                       | Monitor software       | Winpower, Winpower View APP                                                                                  |                                                            |                                                                                                              |
| Physical performance  | Dimension (W*D*H)mm    | 438*445*85.5(2U)                                                                                             | 438*600*85.5(2U)                                           |                                                                                                              |
|                       | IP protection level    | IP20                                                                                                         |                                                            |                                                                                                              |
|                       | Plug solid             | Optional                                                                                                     |                                                            |                                                                                                              |
|                       | Wheel                  | No                                                                                                           |                                                            |                                                                                                              |
| Environment           | Operating temperature  | 0-40℃                                                                                                        |                                                            |                                                                                                              |
|                       | Storage temp           | 0 to 40℃ (32 to 104°F) with batteries & -25 to 55℃ (5 to 140°F) without batteries                            |                                                            |                                                                                                              |
|                       | Relative Humidity      | 0-95%                                                                                                        |                                                            |                                                                                                              |
|                       | Operating Altitude     | 0~3000m (the load derating 1 % every up 100m @1000~3000m)                                                    |                                                            |                                                                                                              |
|                       | Acoustic Noise         | <45dB at front 1m                                                                                            | <50dB at front 1m                                          |                                                                                                              |
| Certification         | UPS                    | CE/CB, IEC62040, UN38.3 UL1973 compliant (Pack)                                                              |                                                            |                                                                                                              |
|                       | EBM                    | IEC62619, UN38.3, UL1973 compliant                                                                           |                                                            |                                                                                                              |
| EMI                   | Conduction / Radiation | C2                                                                                                           |                                                            |                                                                                                              |
| EMS                   | ESD                    | IEC/EN 61000-4-2                                                                                             |                                                            |                                                                                                              |
|                       | RS                     | IEC/EN 61000-4-3                                                                                             |                                                            |                                                                                                              |
|                       | EFT                    | IEC/EN 61000-4-4                                                                                             |                                                            |                                                                                                              |
|                       | Surge IEC/EN 61000-4-5 | IEC/EN 61000-4-5                                                                                             |                                                            |                                                                                                              |

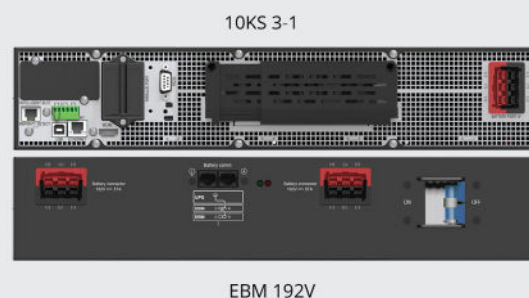
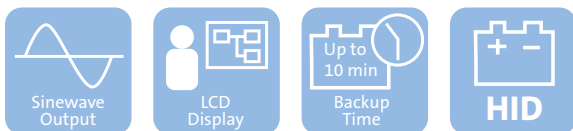
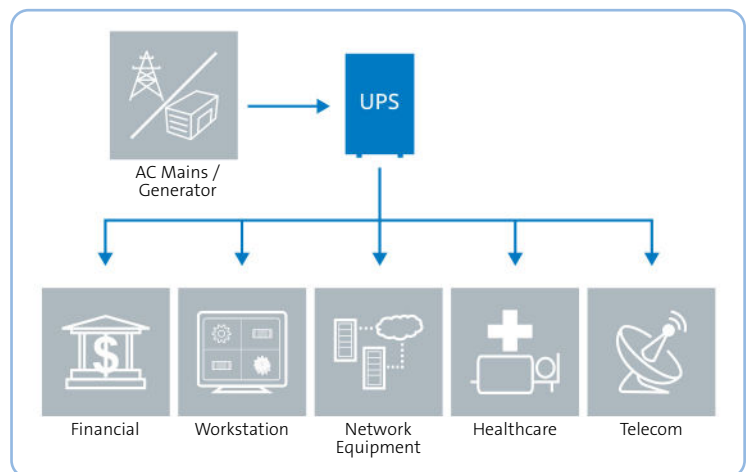
## RT Lithium-Ion 6-10KVA

### KEY FEATURES

- Maximum output power factor is 1, VA=W
- Up to 95% leading efficiency
- Level 3 Built-in lithium battery, synchronisation with UPS (capacity, health, performance, external balancing)
- Extended backup time with up to 8 optional EBM's with automatic detection
- Compact design: 2U UPS+ 1U EBM
- Rack/tower dual set-up with rotatable LCD panel
- USB, RS232 port, dry contacts, RPO & ROO connectors, optional SNMP/Modbus
- Built-in Ethernet port for cloud connection
- Maintenance bypass accessory with load segment control
- Certification of standards:  
UPS: CE  
Battery: UN38.3, UL1973, IEC62619



### TYPICAL APPLICATION



# RT Lithium-Ion 6-10KVA

| Model name                                  |                            | RT 6KS                                                                                                    | RT 10KS                            |
|---------------------------------------------|----------------------------|-----------------------------------------------------------------------------------------------------------|------------------------------------|
| Power rating                                | VA/Watt                    | 6000VA/6000W                                                                                              | 10000VA/10000W                     |
| Efficiency                                  | Double conversion mode     | up to 95.3%                                                                                               |                                    |
|                                             | ECO mode                   | up to 98.7%                                                                                               |                                    |
| Input performance                           | Voltage range              | 110Vac~276Vac                                                                                             |                                    |
|                                             | Rated frequency            | 50Hz/60Hz                                                                                                 |                                    |
|                                             | Frequency range            | 40Hz-70Hz(45Hz-55Hz; 54Hz-66Hz @ load>60%)                                                                |                                    |
|                                             | PF                         | >0.99                                                                                                     |                                    |
|                                             | THDI                       | <3%                                                                                                       |                                    |
| Input connection                            |                            | Terminal block                                                                                            |                                    |
| Output performance                          | Rated voltage              | 220V/230V/240V                                                                                            |                                    |
|                                             | Rated frequency            | 50Hz/60Hz                                                                                                 |                                    |
|                                             | Maximum PF                 | PF = 1                                                                                                    |                                    |
|                                             | Voltage accuracy           | ±1%                                                                                                       |                                    |
|                                             | THDV                       | <1% linear load , <5% non linear load                                                                     |                                    |
|                                             | Performance Classification | VFI-SS-111                                                                                                |                                    |
|                                             | Transfer time              | 0ms(10ms @ ECO->Inverter)                                                                                 |                                    |
|                                             | Crest Ratio                | Max 3:1                                                                                                   |                                    |
|                                             | Overload                   | 100%<load≤105% continuous. 105%< load ≤125% for 10 minutes. 125<load≤150% for 30 seconds. >150% for 500ms |                                    |
| Output connection                           | Wiring/socket              | L/N/PE hardware terminal connection                                                                       |                                    |
|                                             | Load segment control       | Optional (need MBP model)                                                                                 |                                    |
| EBM                                         | Dimension(W*D*H)MM         | 438 X 85.5 X 641.5                                                                                        |                                    |
|                                             | Voltage(V)                 | 192V                                                                                                      |                                    |
|                                             | Capacity(AH)               | 12Ah/2304Wh                                                                                               |                                    |
|                                             | Material                   | Lithium-Ion (LiFePO4)                                                                                     |                                    |
| Backup Time (Full Load)                     |                            | 17min for 1 EBM, 136min for 8 EBM                                                                         | 10 min for 1 EBM, 80 min for 8 EBM |
| BMS                                         |                            | Yes                                                                                                       |                                    |
| External battery module(EBM) auto detection |                            | Yes                                                                                                       |                                    |
| Maximum connect EBM quantity                |                            | 8                                                                                                         |                                    |
| Battery replacement                         |                            | Replace EBM(whole battery pack)                                                                           |                                    |
| EBM connector                               | Power/Signal               | Socket/RJ45                                                                                               |                                    |
| Charger                                     | Charging current           | 2A/EBM, max 12A                                                                                           |                                    |
|                                             | Recharging time            | 4.5h to 90%                                                                                               |                                    |
| Other working mode                          | CVCF                       | Yes (derating to 60% load)                                                                                |                                    |
|                                             | Parallel                   | Optional (up to 3)                                                                                        |                                    |
| HMI                                         | Display                    | Dot matrix LCD, rotatable manually                                                                        |                                    |
|                                             | Language                   | 10 languages                                                                                              |                                    |
|                                             | USB                        | USB 2.0 with HID                                                                                          |                                    |
|                                             | RS232                      | Yes (DB9)                                                                                                 |                                    |
|                                             | Dry in/out                 | 1 programmable dry in; 1 programmable dry out                                                             |                                    |
|                                             | EPO                        | Yes                                                                                                       |                                    |
|                                             | Intelligent slot           | Yes                                                                                                       |                                    |
|                                             | Network card               | Optional                                                                                                  |                                    |
|                                             | Modbus card                | Optional                                                                                                  |                                    |
|                                             | Dry contactor card         | Optional                                                                                                  |                                    |
|                                             | Wireless module            | Optional                                                                                                  |                                    |
|                                             | IOT                        | Yes                                                                                                       |                                    |
|                                             | Monitor software           | Winpower, Winpower View APP                                                                               |                                    |
| Physical performance                        | Dimension (W*D*H)mm        | 438*600.5*86.3(2U)                                                                                        |                                    |
|                                             | IP protection level        | IP20                                                                                                      |                                    |
| Environment                                 | Operating temperature      | 0-40°C                                                                                                    |                                    |
|                                             | Storage temp               | UPS: -25°C-55°C; UPS+EBM: -20°C-55°C                                                                      |                                    |
|                                             | Relative Humidity          | 0-95%                                                                                                     |                                    |
|                                             | Operating Altitude         | 0~3000m(the load derating 1 % every up 100m @1000~3000m)                                                  |                                    |
|                                             | Acoustic Noise             | <50dB @ typical load with battery fully charged                                                           |                                    |
| Certification                               | UPS                        | CE,IEC/EN 62040                                                                                           |                                    |
|                                             | EBM                        | PACK: IEC 62619; UL 1973; UN38.3; Cell: UL1973, IEC62619                                                  |                                    |
| EMI                                         | Conduction / Radiation     | C3                                                                                                        |                                    |
| EMS                                         | ESD                        | IEC/EN 61000-4-2                                                                                          |                                    |
|                                             | RS                         | IEC/EN 61000-4-3                                                                                          |                                    |
|                                             | EFT                        | IEC/EN 61000-4-4                                                                                          |                                    |
|                                             | Surge                      | IEC/EN 61000-4-5                                                                                          |                                    |



## Rack Mounted UPS

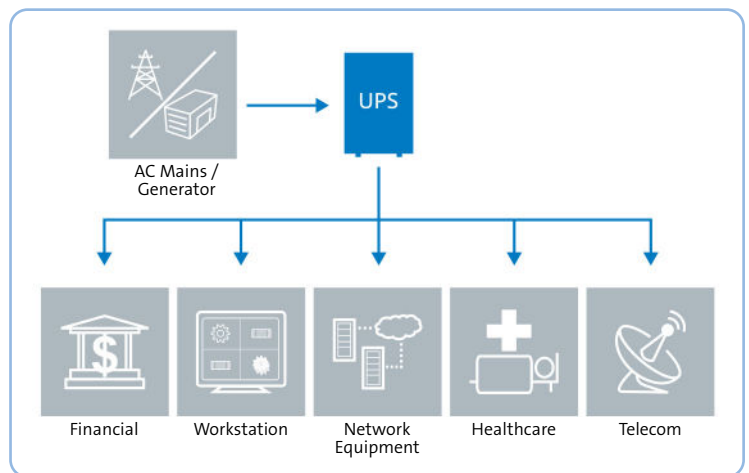
RT HV 1-3K



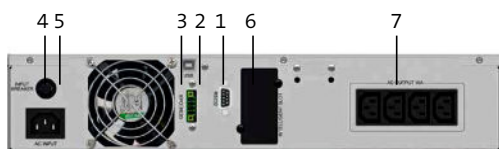
### KEY FEATURES

- True double-conversion design with high adaptability to harsh mains conditions
- 0.9 output power factor with up to 12,5% more power than traditional 0.8pf.
- 2U short depth compact size for space saving
- Programmable LCD display for quick UPS parameters
- Various communication for easy management: RS232/USB, EPO, mini slot
- CE certification

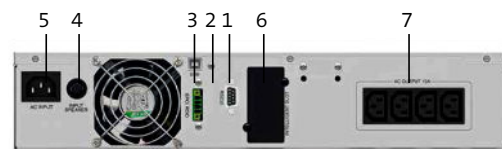
### TYPICAL APPLICATION



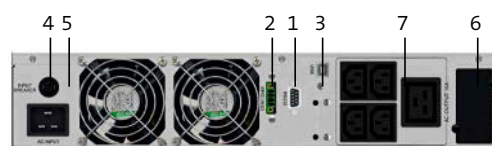
### REAR PANEL



Rack 1K HV



Rack 2K HV



Rack 3K HV

1. RS232
2. EPO/ROO
3. USB

4. Input Circuit Breaker
5. AC Input
6. Intelligent Card Slot

7. AC Output



## Rack Mounted UPS RT HV 1-3K

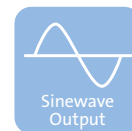
| Model             |                                | 1K                                                    | 2K                            | 3K                                                      |
|-------------------|--------------------------------|-------------------------------------------------------|-------------------------------|---------------------------------------------------------|
| CAPACITY          |                                | 1000VA/900W                                           | 2000VA/1800W                  | 3000VA/2700W                                            |
| Input             | Rated Voltage                  | 208V/220/230/240VAC, 230V default                     |                               |                                                         |
|                   | Input Voltage Range            | 100 ~ 300 VAC                                         |                               |                                                         |
|                   | Frequency Range                | 45~55 Hz/54~66 Hz                                     |                               |                                                         |
|                   | Input Wiring                   | Single Phase with Ground                              |                               |                                                         |
| Output            | Output Power Factor            | 0.9                                                   |                               |                                                         |
|                   | Nominal Output Voltage         | 208V/220/230/240VAC, 230V default                     |                               |                                                         |
|                   | Voltage Regulation             | ±1%                                                   |                               |                                                         |
|                   | Frequency Range (Battery Mode) | 50/60Hz ±0.05Hz                                       |                               |                                                         |
|                   | Overload                       | 100%~105% continuous.<br>60Sec.@105%~130% Rated Load  |                               | 100%~105% continuous.<br>10min.@105%~125%<br>Rated Load |
|                   | Voltage Distortion (THDv)      | <2% @ linear load                                     |                               |                                                         |
|                   | Output Waveform                | Pure Sine Wave                                        |                               |                                                         |
|                   | Parallel Operation             | N/A                                                   |                               |                                                         |
| Output Connection | Socket (IEC)                   | 4 x IEC C13                                           | 4 x IEC C13,1x Terminal block | 4 x IEC C13,1x IEC C19,1x Terminal block                |
| Efficiency        | Inverter Mode                  | 89%                                                   | 90%                           | 91%                                                     |
| Battery           | Battery Type                   | VRLA                                                  | VRLA                          | VRLA                                                    |
|                   | Battery                        | 12V / 9Ah                                             | 12V / 9Ah                     | 12V / 9Ah                                               |
|                   | Number of Internal Battery     | 2                                                     | 4                             | 6                                                       |
|                   | Rated Battery Voltage          | 24VDC                                                 | 48VDC                         | 72VDC                                                   |
|                   | Charging Current               | 1A                                                    | 1A                            | 1A                                                      |
|                   | Recharging time (90%)          | 5 hours                                               | 5 hours                       | 5 hours                                                 |
| Transfer time     | Battery Mode <-> Inverter Mode | 0ms                                                   |                               |                                                         |
|                   | Inverter Mode <-> Bypass Mode  | <4ms                                                  |                               |                                                         |
|                   | ECO Mode <-> Battery Mode      | <10ms                                                 |                               |                                                         |
| Display           |                                | Programmable LCD                                      |                               |                                                         |
| Audible alarm     |                                | Yes                                                   |                               |                                                         |
| Dimension         | WxHxD                          | 439x88x428                                            | 439x88x428                    | 439x88x640                                              |
| Environment       | Operating Temperature          | 0-40° C                                               |                               |                                                         |
|                   | Regulation                     | CE                                                    |                               |                                                         |
|                   | Noise Level                    | <50dB (ISO 7779&At front 1m distance, without buzzer) |                               |                                                         |
| Interface         | RS232/USB                      | Yes                                                   |                               |                                                         |
|                   | External Slot                  | Yes, for optional NMC Card/CMC Modbus Card/AS400 Card |                               |                                                         |
|                   | Emergency Power Off            | Yes                                                   |                               |                                                         |



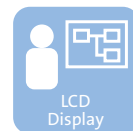
# Online Double Conversion Rack-mount UPS RT HV 6-10K

## KEY FEATURES

- Output power factor 1
- No power derating in full operating temperature range
- Upgrade Winpower software, seamlessly integrated with the virtualisation platform
- Inverter mode efficiency 95%
- Input THDI <3%
- Output THDV <5%
- < 600mm depth can fit different rack installation
- dimensions
- $\pm 3$  hours to 90% battery capacity (external battery bank)



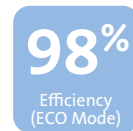
Sinewave  
Output



LCD  
Display



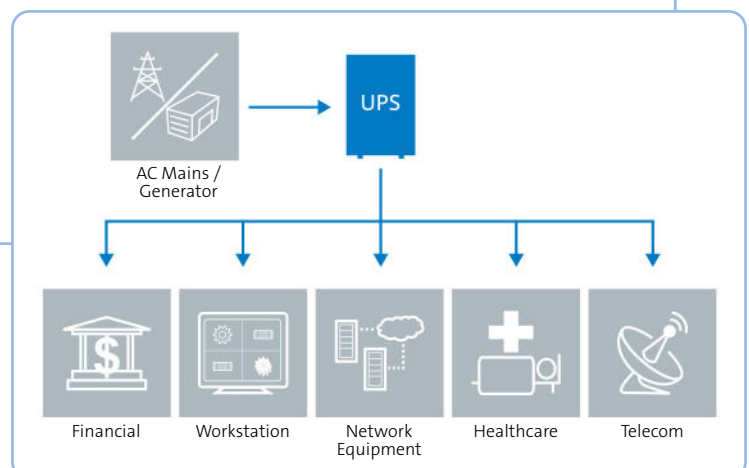
Up to  
3.5 min  
Backup  
Time



98%  
Efficiency  
(ECO Mode)



## TYPICAL APPLICATION







## Online Double Conversion Rack-mount UPS RT HV 6-10K

| Model         |                                        | Unity RT 6K                                        | Unity RT 10K                                       |
|---------------|----------------------------------------|----------------------------------------------------|----------------------------------------------------|
| CAPACITY      |                                        | 6000VA/6000W                                       | 10000VA/10000W                                     |
| Input         | Input Voltage Range                    | 110~276VAC                                         |                                                    |
|               | Frequency Range                        | 40-70Hz                                            |                                                    |
|               | Input Wiring                           | Single phase with ground                           |                                                    |
|               | Current Distortion (THDi)              | <3% @ full load                                    |                                                    |
| Output        | Output Power Factor                    | 1                                                  |                                                    |
|               | Nominal Output Voltage                 | 220/230/240VAC                                     |                                                    |
|               | Voltage Regulation                     | ±1%                                                |                                                    |
|               | Frequency Range (Battery Mode)         | 50/60±0.05 Hz                                      |                                                    |
|               | Current Crest Ratio                    | 3:1                                                |                                                    |
|               | Voltage Distortion (THDv)              | <1 % @ Linear Load, <5% @ Non-Linear Load          |                                                    |
|               | Output Waveform                        | Pure Sine Wave                                     |                                                    |
|               | Parall Operation                       | Up to 3 units                                      |                                                    |
| Efficiency    | Inverter Mode                          | 95%                                                |                                                    |
|               | Battery Mode                           | 92%                                                |                                                    |
|               | ECO Mode                               | 98%                                                |                                                    |
| Battery       | Battery Type                           | 12V/7Ah                                            | 12V/7Ah                                            |
|               | Number of Batteries (External Cabinet) | 20                                                 | 20                                                 |
|               | Backup Time (@ PF0.9 Load)             | 4.5 mins                                           | 3 mins                                             |
|               | Backup Time (@ 80% Load)               | 5.5 mins                                           | 3.5 mins                                           |
|               | Recharge Time (to 90%)                 | 3 hours                                            | 3 hours                                            |
|               | Charging Current                       | 1.4A (0~4A adjustable)                             | 2A (0~4A adjustable)                               |
| Transfer time | Battery Mode <-> Inverter Mode         | 0ms                                                |                                                    |
|               | Inverter Mode <-> Bypass Mode          | 0ms                                                |                                                    |
|               | ECO Mode <-> Battery Mode              | 10ms                                               |                                                    |
| Display       |                                        | LCD                                                |                                                    |
| Audible alarm |                                        | Yes                                                |                                                    |
| Dimension     | WxHxD                                  | 438* 86.2* 573mm (UPS)<br>438*129* 593mm (battery) | 438* 86.2* 573mm (UPS)<br>438*129* 593mm (battery) |
| Environment   | Operating Temperature                  | 0-40° C                                            |                                                    |
|               | Noise Level                            | <45dB @ typical load                               | <50dB @ typical load                               |
| Interface     | RS232/USB                              | Yes                                                |                                                    |
|               | External Slot                          | Yes                                                |                                                    |
|               | Emergency Power Off                    | Yes                                                |                                                    |



## G2 Tower UPS

### RTT HV 1-3K

#### INTRODUCTION

The RT Systems INNOVA Basic G2 Tower 1-3K UPS is a new generation product series. It has higher cost-effective performance, higher charging current, smarter charging, a wider range of rated voltages meeting various customer needs. The INNOVA Basic G2 Series UPS provides flexible configurations and offers multiple extendable options to meet the demand for customised applications.

#### BASIC G2 ENHANCEMENTS:

- Higher charging current
- Improved silence performance
- Smarter charging for better battery life
- A wider range of adjustable input/output rated voltages
- Broader full-load input voltage range

#### SUITABLE FOR:

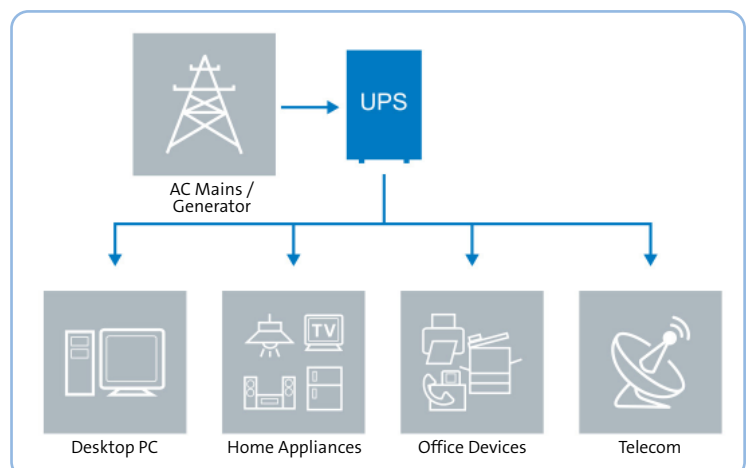
- Small and medium enterprises, branches of large enterprises, bank and government, office and computer room
- Kiosk equipment: ATM, Gate of subway and highway, Vending machine
- Networks, telecom equipment, telephone system
- PLC, automatic control equipment, industrial control panel
- Lab equipment



#### KEY FEATURES

- Higher charging current provides faster charging time 1.5A
- Smarter charging (with temperature compensation) for better battery life
- More options for input and output rated voltage (200/208/220/230/240V)
- Programmable LCD display for quick UPS parameters configuration
- Various communication for easy management: RS232/USB, EPO, Mini slot
- Lower noise provides a quieter experience for users (<45dB/48dB for 1K/2K&3KVA)
- True double-conversion design with high adaptability to harsh mains conditions
- Output power factor 0.9, up to 12.5% more power offer than traditional PF 0.8
- CE certification

#### TYPICAL APPLICATION



# G2 Tower UPS RTT HV 1-3K



1K front panel



2K/3K front panel



1K rear panel



2K/3K rear panel

## DOUBLE CONVERSION TOPOLOGY

- Constantly monitors power conditions and regulates voltage and frequency

## EASY MANAGEMENT

- LED and LCD bar indicators provide detailed and accurate information for management.
- Default communication for easy management: RS232/USB, EPO, Intelligent communication slot
- Winpower monitoring
- Flexible communication card options for management: AS400 mini card, MODBUS mini card and NMC mini card options

## EXCELLENT CHARGING

- Higher charging current for faster charging 1.5A
- Smarter charging solution with temperature compensation for extended battery life

## HIGH PERFORMANCE

- Up to 91% double conversion efficiency
- More options for input and output rated voltage(200/208/220/230/240V)
- Broader full-load input range (176-300V)

## FLEXIBLE BACK UP TIME OFFERING

- Standard internal battery and long back time models for different backup time.

## SAFETY COMPLIANCE

- CE declaration



## G2 Tower UPS RTT HV 1-3K

| Model             |                                | Tower 1K                                                                                               | Tower 2K                      | Tower 3K                                 |
|-------------------|--------------------------------|--------------------------------------------------------------------------------------------------------|-------------------------------|------------------------------------------|
| CAPACITY          |                                | 1000VA/900W                                                                                            | 2000VA/1800W                  | 3000VA/2700W                             |
| Input             | Rated Voltage                  | 200/208V/220/230/240VAC                                                                                |                               |                                          |
|                   | Input Voltage Range            | 176-300V 100% load, 110-176V derating to 50% load linearly                                             |                               |                                          |
|                   | Frequency Range                | 45~55 Hz/54~66 Hz                                                                                      |                               |                                          |
| Output            | Output Power Factor            | 0.9                                                                                                    |                               |                                          |
|                   | Nominal Output Voltage         | 200/208/220/230/240 VAC (derating 10% at 200V/208V)                                                    |                               |                                          |
|                   | Voltage Regulation             | ±1%                                                                                                    |                               |                                          |
|                   | Frequency Range                | 50/60Hz                                                                                                |                               |                                          |
|                   | Overload                       | 100%~105% continuous. 60Sec.@105%~130% Rated Load, 10Sec.@130%~150% Rated load, 300ms.@>150%Rated load |                               |                                          |
|                   | Voltage Distortion (THDv)      | <2% linear load; <6% nonlinear load                                                                    |                               |                                          |
|                   | Output Waveform                | Pure Sine Wave                                                                                         |                               |                                          |
| OUTPUT CONNECTION | Socket (IEC)                   | 4 x IEC C13                                                                                            | 4 x IEC C13,1x Terminal block | 4 x IEC C13,1x IEC C19,1x Terminal block |
| Efficiency        | Inverter Mode                  | 89%                                                                                                    | 90%                           | 91%                                      |
| Battery           | Battery                        | 12V / 9Ah(7Ah optional)                                                                                | 12V / 9Ah(7Ah optional)       | 12V / 9Ah(7Ah optional)                  |
|                   | Number of Internal Battery     | 2                                                                                                      | 4                             | 6                                        |
|                   | Rated Battery Voltage          | 24VDC                                                                                                  | 48VDC                         | 72VDC                                    |
|                   | Charging Current               | 1.5A                                                                                                   | 1.5A                          | 1.5A                                     |
|                   | EBM connector                  | NA                                                                                                     | NA                            | NA                                       |
| Transfer time     | Battery Mode <-> Inverter Mode | 0ms                                                                                                    |                               |                                          |
|                   | Inverter Mode <-> Bypass Mode  | <4ms                                                                                                   |                               |                                          |
| Display           |                                | Segment LCD                                                                                            |                               |                                          |
| Audible alarm     |                                | Yes                                                                                                    |                               |                                          |
| Dimension         | WxHxD                          | 144*229*347                                                                                            | 190*297*391                   | 4190*297*391                             |
| Environment       | Operating Temperature          | 0-40° C                                                                                                |                               |                                          |
|                   | Regulation                     | CE                                                                                                     |                               |                                          |
|                   | Noise Level                    | <45dB/48dB for 1K/2K&3KVA STD model                                                                    |                               |                                          |
| Interface         | RS232/USB                      | Yes                                                                                                    |                               |                                          |
|                   | External Slot                  | Yes, for optional NMC Card/CMC Modbus Card/AS400 Card                                                  |                               |                                          |
|                   | Emergency Power Off            | Yes                                                                                                    |                               |                                          |

Due to continuous product improvement, all specifications are subject to change without notice.

# RTsystems

## Line Interactive UPS

### RT650VA



#### INTRODUCTION

The RT Systems RT650VA Line Interactive UPS is a compact, intelligent power protection solution designed to safeguard personal computers and sensitive electronics from disruptions – including complete power failures. Reliable, efficient, and easy to use, it delivers peace of mind for both home and office applications.

#### FUNCTIONS & OPERATION

##### DC Start Function

DC Start Function enables the UPS to be started up when AC utility power is not available and battery is fully charged. Just simply press the power switch to turn on the UPS.

##### Green Power Function

The product is equipped with a Green Power Function for saving power and protecting the battery. Deep discharge protection is adopted in battery mode. If no load is connected to the UPS, it will automatically shut down after 5 minutes for energy saving while running on battery mode. The UPS will restart while the AC power recovers.

##### AVR (Automatic Voltage Regulation)

If the quality of the incoming mains is poor, the AVR boosts a low incoming voltage or reduces a high one. The load receives voltage within the normal range.

##### Auto restart on AC recovery

##### Audio Indicator

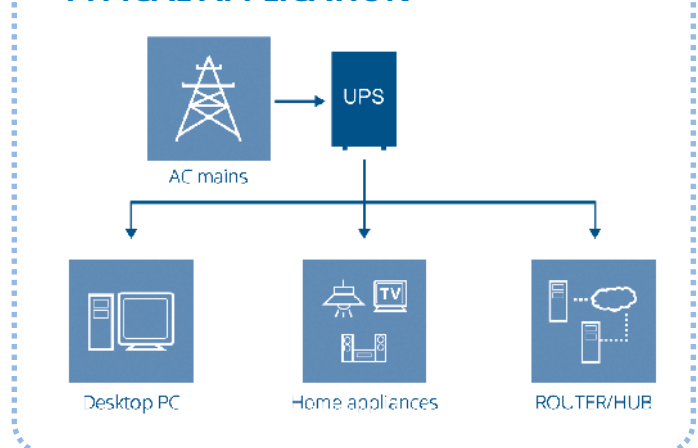
Different audible alarm sounds for UPS status:

- Every 10 seconds: Battery Mode
- Every 1 second: Battery Low
- Every 0.5 seconds: Overload
- Continuous: Faulty

#### PRODUCT FEATURES

- Microprocessor control – maximises reliability & efficiency
- Boost & Buck AVR – automatic voltage regulation
- DC Cold Start – power up without mains supply
- Green Power Function – energy-saving design
- Auto Restart on AC Recovery – hassle-free continuity
- AC Overload Protection – built-in safety
- RJ11/RJ45 Protection – shields LAN, modem & phone lines

#### TYPICAL APPLICATION



# Line Interactive UPS

## RT650VA



| Model                   | RT650VA                                       |
|-------------------------|-----------------------------------------------|
| CAPACITY                | 650VA / 360W                                  |
| <b>INPUT</b>            |                                               |
| Voltage                 | 230 VAC                                       |
| Voltage Range           | 170~280 VAC                                   |
| <b>OUTPUT</b>           |                                               |
| Voltage                 | 220/230/240 VAC                               |
| Voltage Regulation      | +/-10% (Battery mode)                         |
| Frequency Range         | 50/60Hz                                       |
| Frequency Regulation    | ±1Hz (Battery mode)                           |
| Transfer Time           | Typical 4-8ms                                 |
| Waveform                | Modified Sine Wave                            |
| <b>PROTECTION</b>       |                                               |
| Full protection         | Discharge, overcharge and overload protection |
| <b>ENVIRONMENT</b>      |                                               |
| Humidity                | 0-90 % RH @ 0° to 40° C (non-condensing)      |
| Noise Level             | Less than 40dB                                |
| <b>SOFTWARE</b>         |                                               |
| Monitoring Software     | WinPower (included)                           |
| <b>BATTERY</b>          |                                               |
| Type & Number           | 12V/7Ah x 1                                   |
| Charging Time           | 6 hours recover to 90% capacity               |
| Backup Time (est. 100W) | 16 min                                        |
| <b>PHYSICAL</b>         |                                               |
| LCD Indicator           | LCD display                                   |
| Outlet                  | 4 x IEC outlets                               |
| Connector               | USB port, RJ11 Surge Protection               |
| Dimension (DxWxH)       | 290mm x 100mm x 143mm                         |
| <b>WEIGHT</b>           |                                               |
| Net weight              | 4.4kg                                         |

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