

# Li-ion UPS

6 kVA ~40 kVA



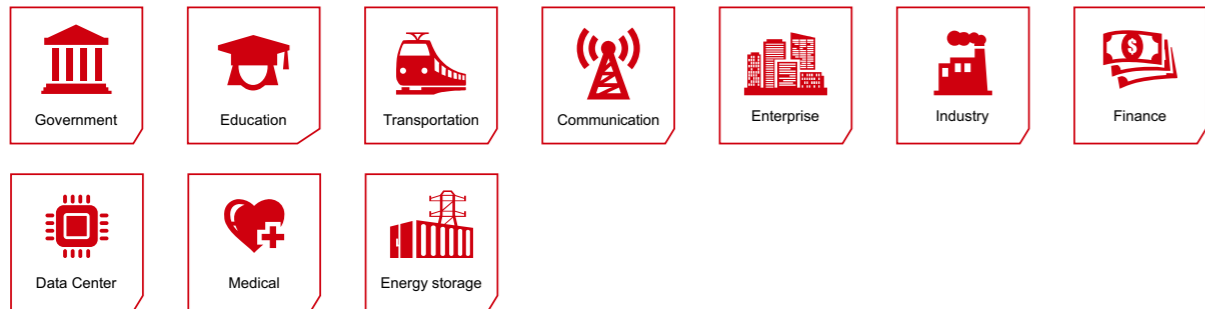
## Product Introduction

All-in-one solution including Rack Mount UPS, S<sup>3</sup> Lithium-ion Battery and Distribution Unit. The solution has several key advantages as follow:

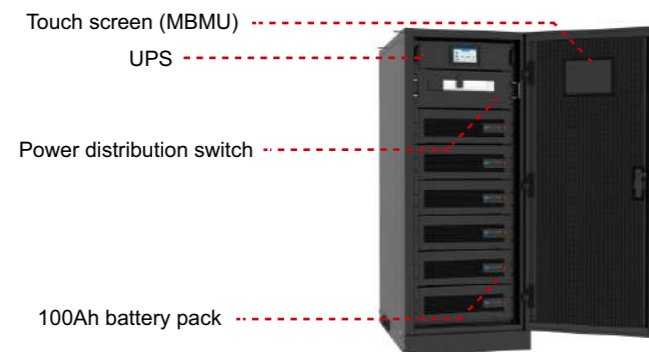
- All in one design, simple and compact, no additional battery cabinet and distribution box, small footprint
- Touch screen monitoring, covering UPS+S<sup>3</sup>, convenient for users to quickly query information
- 6~40K rack UPS are available to give you the most reliable backup power
- Built-in lithium battery module to provide long-term backup power and the hot-swappable design for easy maintenance

## Application

Government, education, transportation, communication, inance, data center, medical, enterprise, industry, etc.



## Product Configuration



## Product Features

### UPS - Green Power

- AC/AC efficiency up to 99%, less operation cost and more energy saving.
- Output power factor up to 1.0 (optional), more powerful to connect more critical loads.
- Input PF >0.99 and THDi <3%, less pollution and lower TCO.



10~40kVA  
Built-in rack UPS

### Lithium-ion Battery - Safe

- **Electrical and physical double isolation**
  - Reduces the fault scope to an effective space without diffusion
  - Port zero voltage, no risk of short circuit shock
- **Module fire protection**
  - Can quickly, accurately and effectively detect and extinguish the fire source in the initial stage
- **Failure module exit automatically**
  - Modular parallel design, failure module exit automatically, will not affect the system. Other modules can work normally. Improve the reliability

### Lithium-ion Battery - Smart

- **Module design, plug and play**
  - 5mins maintenance, reduce the OPEX cost
- **Flexible for expansion**
  - Module design, can expand the capacity of modules or cabinets.
  - Reduce the CAPEX cost



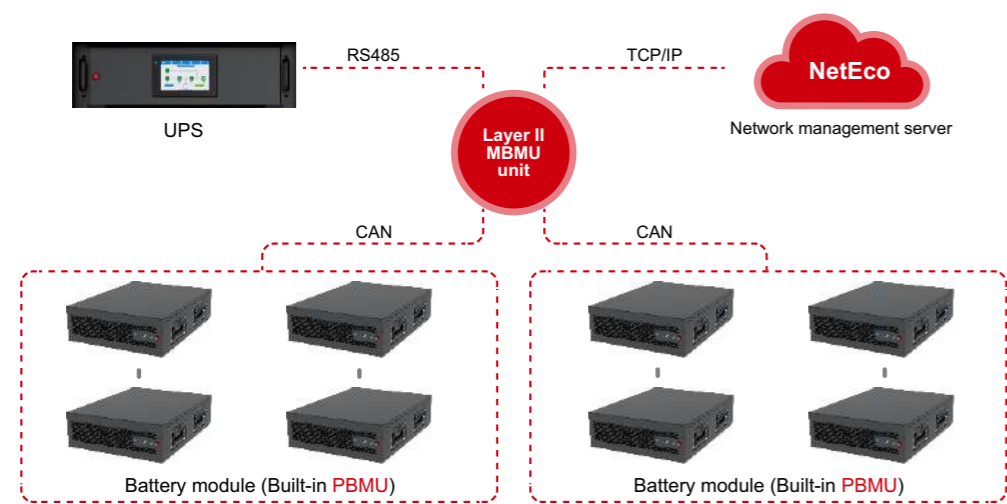
Module level  
expansion battery

### Lithium-ion Battery - Simple

- **Intelligent current equalization**
  - Can be used with new and old batteries
  - Can be used with lithium-ion batteries from different suppliers
- **Intelligent voltage equalization**
  - Intelligent voltage equalization module, no barrel effect
  - Prolong the backup time, improve battery utilization
- **Adaptive SOC management**
  - Intelligent charge and discharge management, avoid over charge and over discharge
  - Detects the battery internal temperature. Improve the safety and reduce the OPEX cost

Featured Two-layer BMS Architecture

The adopted two-layer BMS architecture (PBMU/MBMU) ensures the reliability of lithium-ion battery system from cell, module and system layers.



Battery Configuration Table

1. 100Ah battery module for short time power backup

UPS capacity (kW) \ Battery module (mins)	1	2	3	4	5	6
6	44	87	131	175	219	263
10	/	50	75	100	125	150
20	/	/	38	50	63	75
30	/	/	/	38	44	50
40	/	/	/	/	/	40

Technical Parameters (Battery)

Battery	Lithium Battery
Battery rated voltage (V)	51.2
Battery capacity (Ah)	100
Max. energy (kWh)	5.12
DC/DC rated output power (kW)	7.5
Dimensions (W×D×H) (mm)	440x720x160
Weight (kg)	51±1
Rated output voltage (V)	70~300
SOC accuracy	≥95%

● All speciications are subject to change without notice.

Technical Parameters (All-in-one Solution)

Rated Power	6K	10K	10K	20K	30K	40K
INPUT						
Phase	1:1		3:3			
Voltage (Vac) <sup>1</sup>	110~288		190~478			
Frequency (Hz)	40~70		40~70			
Power Factor	≥0.99					
THDi	<3% (linear load)					
OUTPUT						
Phase	1:1		3:3			
Capacity (kVA)	6	10	10	20	30	40
AC/AC Efficiency (Max.)	95.5%		96%			
Power Factor	0.99		0.99			
Voltage (Vac) <sup>2</sup>	208/220/230/240±1%		380/400/415±1%			
Frequency (Hz)	40~70		40~70			
THDv	THD <1% (linear load), THD <4% (non-linear load)		THD <1% (linear load), THD <3% (non-linear load)		THD <1% (linear load), THD <3% (non-linear load)	
Transfer Time (ms)	0					
Overload	115%~130%: 10min; 130%~150%: 30s; >150%: 500ms		115%~125% load: 10min, 125%~150% load: 1min, >150% load: 200ms			
GENERAL						
Communication Interface	RS232, EPO, USB (slot) (SNMP, RS485+dry contact are optional in slot)		RS485+EPO (RS232+Dry contact, SNMP are optional in slot)			
Display	LCD					
Alarm	Low battery, abnormal AC input, UPS failure, etc.					
Protection	Low battery, overload, short-circuit and over temperature, etc.					
Noise (dB)	<55					
Working Temperature (°C)	-5~40					
Relative Humidity	0 ~ 95%, no condensation					
Dimension (W×D×H)(mm)	UPS	440×580×88 (2U)		440×660×130 (3U)		440×660×130 (3U)
	Cabinet	600×900×(1200/1500/1700)				
Weight (kg)	UPS	12	14	20		34
	Cabinet*	120				

● Without built-in UPS and batteries.