

UPS+S³ Lithium-ion Battery All-in-one Solution



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Product Introduction

The all-in-one S³ lithium-ion battery solution is integrated the UPS, power distribution, battery into one cabinet. It is mainly used in commercial applications, such as IT computer rooms, regional office buildings, commercial security systems, and is committed to providing customers the long back-up time with the small footprint product.

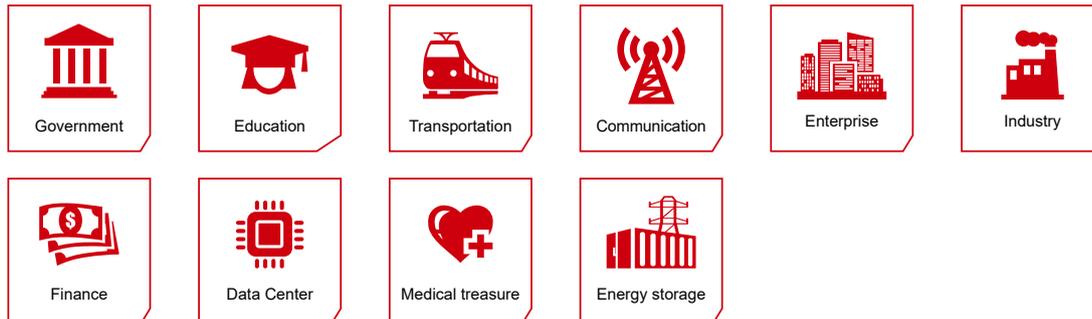
- All in one design, simple and compact, no additional battery cabinet and distribution box, small footprint.
- Touch screen monitoring, covering UPS+S³, convenient for users to quickly query information.
- 6-40K rack UPS are available to give you the most reliable backup power.
- Built-in lithium battery module to provide long-term backup power and the hot-swappable design for easy maintenance.



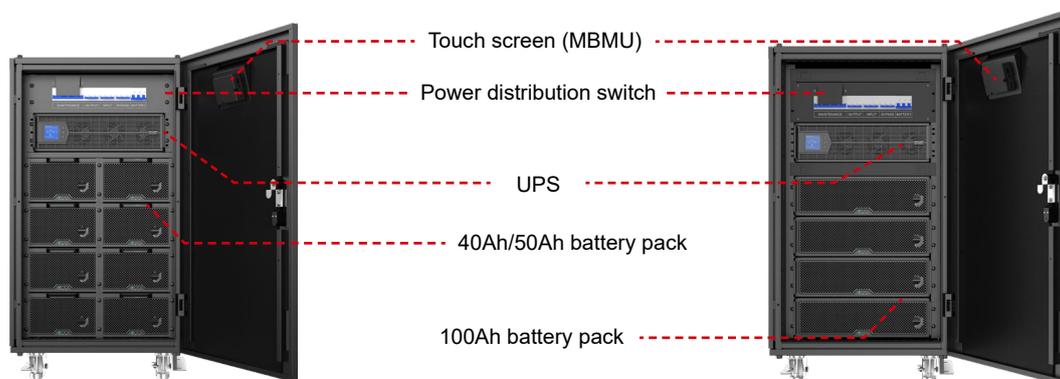
UPS+S³ Lithium-ion Battery
All-in-one Solution

Application

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



Product Configuration



40Ah/50Ah lithium-ion battery system cabinet

100Ah lithium-ion battery system cabinet

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Product Features

Compact

Integrated the battery, UPS and power distribution switches into one cabinet, suitable for the long back time application with the small footprint, convenient for maintenance

- **Battery packs in parallel design**

- Modular parallel design, flexible for expansion
- Combine with the DC/DC module, support the mixed use with the old and new batteries at the module level
- Failure module exit automatically, will not affect the system. Other modules can work normally. Improve the reliability



Mixed use with the old and new batteries

Safe

- **DC/DC isolated solution**

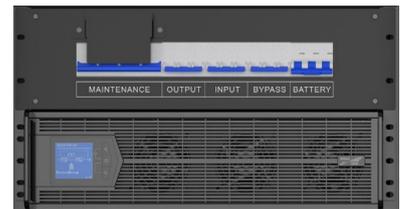
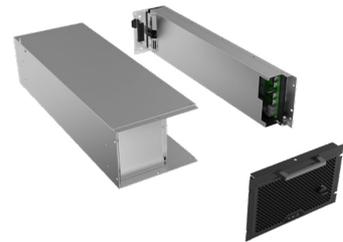
- Electrical isolation, isolated the mains with the battery. Guarantee the safety.
- Reduces safety risks due to liquid leakage from battery cells

- **Fire-fighting protection**

- Even under the battery failure (under extreme condition), can ensure the firefighting protection

- **Full breaker design**

- Full protection with input, output, bypass, and maintenance bypass breaker, battery breaker, improve the reliability



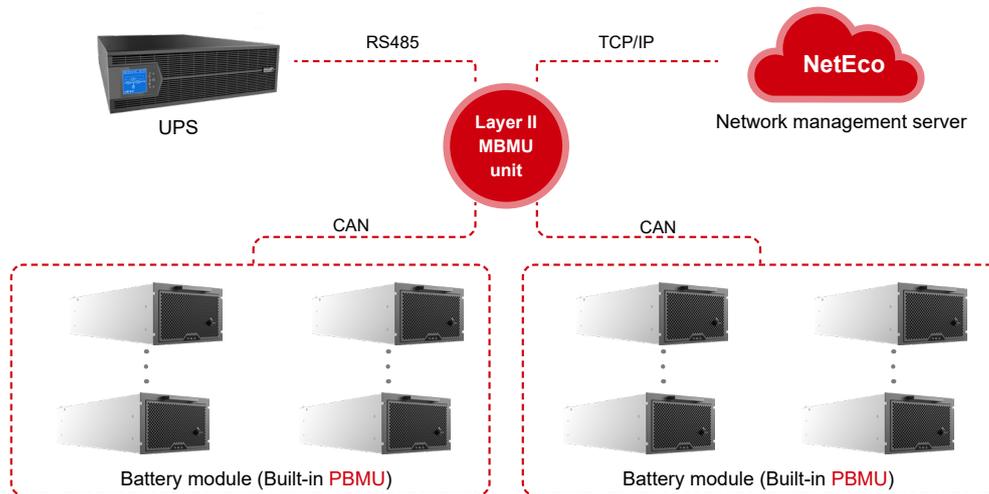
Convenient

- **Centralized monitoring** the batteries and the UPS, all the information can be visualized on one touch screen.
- **Modular design**, plug and play, Minute-level maintenance, reduce the OPEX cost
- **Tilt design touch screen**, friendly for the users, convenient for operation



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. 40Ah battery module for short time power backup

Battery module (mins) \ UPS capacity (kW)	1	2	3	4	5	6	7	8
6	18	36	54	72	90	108	126	144
10	10	20	30	40	50	60	70	80
20	/	10	15	30	25	30	35	40
30	/	/	10	20	16	20	23	26
40	/	/	/	10	12	15	17	20

2. 50Ah battery module for short time power backup

Battery module (mins) \ UPS capacity (kW)	1	2	3	4	5	6	7	8
6	25	50	75	100	125	150	175	200
10	15	30	45	60	75	90	105	120
20	/	15	22	30	37	45	52	60
30	/	/	15	20	25	30	35	40
40	/	/	/	15	18	22	26	30

3. 100Ah battery module for long time power backup

Battery module (mins) \ UPS capacity (kW)	1	2	3	4
6	/	100	150	200
10	/	60	90	120
20	/	/	/	60

- The above configuration is for reference only, subject to actual measurement

Technical parameters (All-in-one Solution)

Product Type	S3C040-1106 S3C050-1106 S3C100-1106	S3C040-1106 S3C050-1106 S3C100-1110	S3C040-3310 S3C050-3310 S3C100-3310	S3C040-3320 S3C050-3320 S3C100-3320	S3C040-3330 S3C050-3330 S3C100-3330	S3C040-3340 S3C050-3340 S3C100-3340
Power Rating	6K	10K	10K	20K	30K	40K
INPUT						
Phase	1:1		1:1/3:1/3:3		3:1/3:3	
Voltage (Vac) ¹	80-275		138-485 (L-L)			
Frequency (Hz)	50/60± 10% (50/60Hz auto-sensing)		40-70			
Power Factor	≥0.99					
THDi	<3% (linear load)					
OUTPUT						
Phase	1:1		1:1/3:1/3:3		3:1/3:3	
Capacity (kVA)	6	10	10	20	30	40
AC/AC Efficiency (Max.)	95.5%		96%			
Power Factor	0.9 (1.0 optional)		0.9 (1.0 at 40°C)			
Voltage (Vac) ²	208/220/230/240±1% (settable on display panel)		380/400/415±1% (L-L)			
Frequency (Hz)	50/60±0.2% (battery mode)		50/60±0.1% (battery mode)			
THDv	THD <1% (linear load), THD < 4% (non-linear load)		THD <2% (linear load), THD < 4% (nonlinear load)		THD <1% (linear load), THD <3% (nonlinear load)	
Transfer Time (ms)	0					
Overload	115%~130%: 10min; 130%~150%: 30s; >150%: 500ms		115%~130% load: 15 min, 130%~150% load: 1 min, >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	438×500×87 (2U)		438×500×130 (3U)		438×680×130 (3U)
	Cabinet	600×1000×1110 (with wheels) 600×1000×1000 (without wheels)				
Weight (kg)	UPS	10.6	12.2	20		34
	Cabinet**	120				

¹040 means 40Ah battery pack, 050 means 50Ah battery pack, 100 means 100Ah battery pack.

**Without built-in UPS and batteries.

Technical parameters (Battery)

Battery	S3M040-6C-240-X	S3M050-4C-240-X	S3M100-1C-240-X
Battery rated voltage (V)	51.2	57.6	
Battery capacity (Ah)	40	50	100
Max. energy (kWh)	2.05	2.8	5.7
DC/DC rated output power (kW)	10		5
Dimensions (W×D×H) (mm)	223×665×153		440×665×132
Weight (kg)	36±2	38±2	50±2
Maximum battery module quantity	8		4
Rated output voltage (V)	240/±240/480		
SOC accuracy	≥95%		

- Specifications are subject to change without notice;

Reliable • Flexible • Responsible

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