X120KT

Liquid Cooling Energy Storage System

Ideal for microgrids, load shifting, renewable energy consumption, energy buffers, off-grid power supply, backup power applications, etc.

All-in-one

Integrated with liquid cooled battery system, PCS, DC-DC converter, transformer, STS, liquid cooling system, fire extinguishing system, distribution system, and EMS.

High Safety Standard

Using high-safety performance lithium iron phosphate batteries. Meets standards such as NFPA855, EN50549 and UL.

Flexible Configuration

Adjustable configurations to achieve optimal cost-effectiveness. Up to 2 cabinets for parallel use.

Plug and Play

The system is pre-installed. Just make simple settings to use.

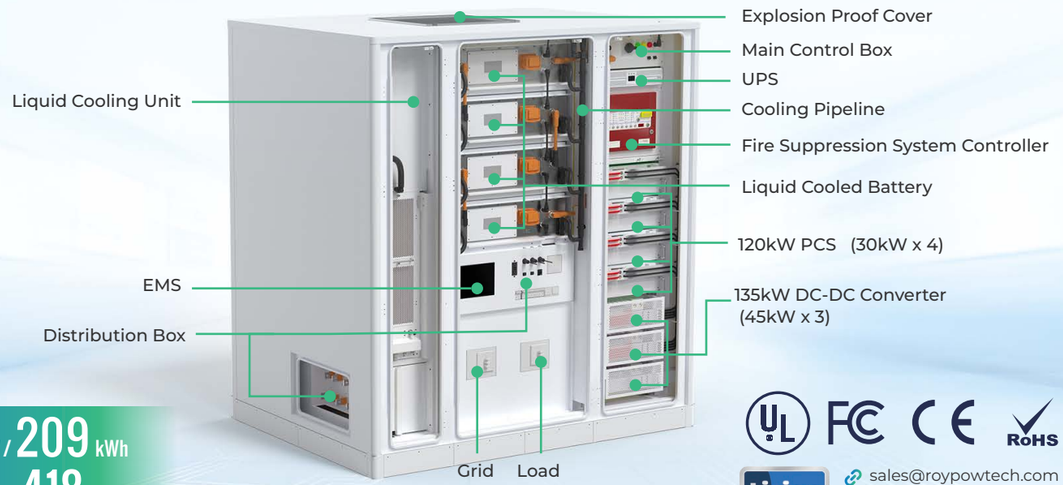
Excellent Adaptability

Higher protection design and excellent heat dissipation technology enable it to operate stably in harsh environments. The compact spatial layout effectively reduces the footprint.

Intelligent Management

Integrated EMS & 4G LTE modem, supporting remote monitoring of devices through web and app.

System Composition



From 30 kW / 209 kWh
to 240 kW / 418 kWh

Li-ion

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Specifications

Model	X120KT-U/A	X120KT-E/A
AC Output (On-grid)		
Rated Power	30 kW x N (N=1~4 adjustable)	30 kW x N (N=1~4 adjustable)
Rated Voltage / Frequency	480 V (±15) / 60 Hz	400 VAC / 50 Hz
THDI	≤3%	≤3%
Apparent Power	33 kVA x N (N=1~4 adjustable)	33 kVA x N (N=1~4 adjustable)
AC Connection	3P3W + PE	3P3W + N + PE
Power Factor	-0.8 ~ + 1	-0.8 ~ + 1
AC Output (Off-grid)		
Rated Power	30 kW x N (N=1~4 adjustable)	30 kW x N (N=1~4 adjustable)
Rated Voltage / Frequency	480 V (±5) / 60Hz	400 VAC / 50Hz
THDI	≤3%	≤3%
Backup Switch Time	20 ms	20 ms
Apparent Power	33 kVA x N (N=1~4 adjustable)	33 kVA x N (N=1~4 adjustable)
AC Connection	3P3W + PE	3P3W + N + PE
Power Factor	-0.8 ~ + 1	-0.8 ~ + 1
Over Capacity	110%~120%, 10 min 120%~130%, 1 min 130%~150%, 200 ms >150%, 100 ms	110%~120%, 10 min 120%~130%, 1 min 130%~150%, 200 ms >150%, 100 ms
Battery		
Battery Chemistry	$LiFePO_4$	$LiFePO_4$
DoD	80%	80%
Rated Capacity	209 kWh	209 kWh
DC Input (PV)		
Max. Power	45 kW x N (N=1~4 adjustable)	45 kW x N (N=1~4 adjustable)
Number of MPPT / Number of MPPT Input	3 x N	3 x N
Max. Input Current	35 A / 35 A / 35 A	35 A / 35 A / 35 A
MPPT Voltage Range	200 ~ 750 V	200 ~ 750 V
Number of String per MPPT	2	2
Start-up voltage	250 V	250 V
Physical		
Ingress Rating	NEMA 3R	IP54
Scalability	Max. 2 in parallel	Max. 2 in parallel
Relative Humidity	0 ~ 100% non-condensing	0 ~ 100% non-condensing
Fire Suppression System	Hot aerosol (cell & cabinet)	Hot aerosol (cell & cabinet)
Max. Efficiency	93.5%	93.5%
Topology	Transformer	Transformer
Operating Ambient Temperature	-20 ~ 50℃ (-4 ~ 122℉)	-20 ~ 50℃ (-4 ~ 122℉)
Noise Emission (dB)	≤70	≤70
Cooling	Liquid cooling	Liquid cooling
Altitude (m)	4000 (>2000 derating)	4000 (>2000 derating)
Weight (kg)	≤3 ton	≤3 ton
Dimensions, LxWxH	1450 x 1900 x 2250 mm	1450 x 1900 x 2250 mm
Standard Compliance	UL9540 / UL9540A / FCC / UL1973 / UL1741 / UL1741SA / IEEE1547 / CA RULE 21	EN50549, AS4777.2, VDE4105, G99, IEEE1547, NB/T 32004, IEC62109, NB/T 32004, UL1741, IEC61000, NB/T 32004

1. All pictures shown are for reference only and data are based on ROYPOW standard test procedures.
2. Actual performance may vary according to local conditions. Only authorized personnel are allowed to operate or make adjustments to the batteries.
3.We reserve the right to make revisions as well as product alterations and improvements at any time without prior notice.