



Online Transformerless UPS Series

- Medium to large power capacity -

Stock code 002518



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HPM3300E Subrack Modular Series

Online Transformerless UPS series
Power range : 40~150kVA (3-Level PF: 1.0)

Mode: 3 phase input and 3 phase output
Module: 40/50/60kVA



Modular design

- All units adopt modular design, including power module, bypass module, monitoring module, can be easily integrated in MDC or customized cabinet
- Power module, Bypass module, Monitoring module, ECU control module, all these modules are hot-swappable

High reliability

- Wide input voltage range, line voltage range is 138-485V, UPS will derate to 40% when input voltage is below 305V
- UPS adopts multiple digital bus and redundancy parallel control system, making sure the whole system keep online if any single circuit fail
- The UPS will keep on single or parallel working, if any module fail
- Thickened conformal coating, applicable for harsh environment such as high heat, high humidity, dust, salt spray

Green and power saving

- High input power factor, it is up to 0.99
- 3-level topology design, efficiency is up to 96%
- THDi<3% (100% linear load)
- The UPS will work in sleeping mode when the load is very small

LBS function

- LBS function can realize 2 independent UPS system work in synchronization, and it enhances the reliability of the system

VRLA&Lithium battery supportable

- VRLA battery number of each group can be selected from 30pcs to 50pcs (continuously adjustable)
- Match with Kstar KLi series lithium battery rack, providing higher power density, lower footprint and longer cycle life
- Configuration of VRLA or Lithium can be chose from LCD
- Two wire connection, simplify the construction on site and save the cost of battery neutral cable

Parallel redundancy function

- Support parallel expanded operation: maximum is 8 units
- Support sharing batteries for the UPS in parallel

Strong load capacity

- Output power factor is 1.0, UPS can supply power to 100% unbalanced load
- High adaptability for load, it can connect full inductive load or capacitive load

Intelligent management

- Standard colorful touch screen
- Support recording and exporting history logs and fault logs
- Support SNMP, RS232, RS485, BMS, Dry contact interface
- Support upgrade of CAN of power module inside of cabinet

Compatible with generator

- Power Walk In function, it can reduce the start current impact to system, and it can reduce the capacity of generator

HPM3300E Subrack Modular Series

Technical Specifications:

Module Model	HPM3300E-RM-40		HPM3300E-RM-50		HPM3300E-RM-60
Cabinet Model	HPM3300E-80	HPM3300E-120	HPM3300E-100	HPM3300E-150	HPM3300E-120
Cabinet capacity (VA)	40k~80k	40k~120k	50k~100k	50k~150k	60k~120k
Module capacity (VA)	40k		50k		60k
Max. number	2+1	3	2+1	3	2+1
INPUT					
Nominal voltage	380/400/415Vac, (3Ph+N+PE)				
Operating voltage range	138~305Vac for 40% load; 305~485Vac for 100% load				
Operating frequency range	40Hz~70Hz				
Power factor	≥0.99				
Harmonic distortion (THDi)	≤3% (100% linear load)				
Bypass voltage range	Max. voltage : 220V: +25% (optional+10%, +15%, +20%); 230V : +20% (optional +10%, +15%); 240V : +15% (optional +10%) Min. voltage : -45% (optional-10%, -15%, -20%, -30%)				
Bypass frequency range	±10%				
Power walk in	Support				
Generator input	Support				
OUTPUT					
Rated voltage	380/400/415Vac, (3Ph+N+PE)				
Power factor	1.0				
Voltage regulation	±1%				
Output frequency	Synchronize with input, when the input frequency > ±10% (±1%/±2%/±4%/±5% optional), output 50/60 (±0.1Hz)				
Crest factor	3:1				
Harmonic distortion (THDv)	≤2% with linear load; ≤4% with nonlinear load				
Efficiency	96%				
BATTERY					
Battery voltage	VRLA battery	360Vdc~600Vdc (30~50pcs continuously adjustable, 30pcs default, 36~50pcs no power derating; 32~35pcs output power factor 0.9; 30/31pcs output power factor 0.8)			
	Lithium battery	512Vdc			
Power module charge current		20A (Max.)			
SYSTEM FEATURES					
Transfer time		Utility to Battery : 0ms; Utility to Bypass : 0ms			
Overload	Inverter mode	≤110% 60min, ≤125% 10min, ≤150% 1min, >150% 1.2s shut down inverter			
	Bypass mode	30°C : 135% for long term; 40°C: 125% for long term; >1000%, 100ms			
Overheat		Line Mode: Switch to Bypass; Backup Mode: Shut down UPS immediately			
Low battery voltage		Alarm and Switch off			
Self-diagnostics		Upon Power On and Software Control			
Backfeed protection		Support			
Battery		Advanced Battery Management			
Noise suppression		Complies with EN62040-3			
Audible & visual alarms		Line Failure, Battery Low, Overload, System Fault			
Status LED & LCD display		Line Mode, Bypass Mode, Battery Low, Battery Fault, Overload & UPS Fault			
Reading on the LCD display		Input, Output, Battery, Command, Setting, Maintenance			
Communication interface		RS232, RS485, Parallel, LBS, BMS, Dry contact port, Relay card(optional), SNMP card(optional), Battery temperature sensor(optional)			
ENVIRONMENTAL					
Operating temperature		0°C~40°C			
Storage temperature		-25°C~55°C			
Humidity range		0~95% (non condensing)			
Altitude		<1500m, derating required when >1500m			
Noise level		<57dB	<58dB		<62dB
PHYSICAL					
Dimension	UPS cabinet	485×850×620			
W×D×H (mm)	Power module	440×620×130			
Net weight (kg)	UPS cabinet	103		113	110
	Power module	33		34	35
STANDARDS					
Safety		IEC/EN62040-1, IEC/EN62477-1			
EMC		IEC/EN62040-2 (IEC61000-4-2, IEC61000-4-3, IEC61000-4-4, IEC61000-4-5, IEC61000-4-6, IEC61000-4-8)			

Specifications are subject to change without prior notice.

HPM3300E Modular Series

Online Transformerless UPS series

Power range : 50~1200kVA (3-Level PF: 1.0)

Mode: 3 phase input and 3 phase output

Module: 50/60kVA (3U)



Modular design

- All units adopt modular design, including power module, bypass module, monitoring module, can be easily integrated in MDC or customized cabinet
- Power module, Bypass module, Monitoring module, ECU control module, all these modules are hot-swappable

High reliability

- Wide input voltage range, line voltage range is 138-485V, UPS will derate to 40% when input voltage is below 305V
- UPS adopts multiple digital bus and redundancy parallel control system, making sure the whole system keep online if any single circuit fail
- The UPS will keep on single or parallel working, if any module fail
- Thickened conformal coating, applicable for harsh environment such as high heat, high humidity, dust, salt spray

Green and power saving

- High input power factor, it is up to 0.99
- 3-level topology design, efficiency is up to 96%
- THDi<3% (100% linear load)
- The UPS will work in sleeping mode when the load is very small

LBS function

- LBS function can realize 2 independent UPS system work in synchronization, and it enhances the reliability of the system

VRLA&Lithium battery supportable

- VRLA battery number of each group can be selected from 30pcs to 50pcs (continuously adjustable)
- Match with Kstar KLi series lithium battery rack, providing higher power density, lower footprint and longer cycle life
- Configuration of VRLA or Lithium can be chose from LCD
- Two wire connection, simplify the construction on site and save the cost of battery neutral cable

Parallel redundancy function

- Support parallel expanded operation: maximum is 8 units
- Support sharing batteries for the UPS in parallel

Strong load capability

- Output power factor is 1.0, UPS can supply power to 100% unbalanced load
- High adaptability for load, it can connect full inductive load or capacitive load

Intelligent management

- With 7 inches (standard) and 10 inches (optional) colorful touch LCD screen
- Support recording and exporting history logs and fault logs
- Support SNMP, RS232, RS485, BMS, Dry contact interface
- Support upgrade of CAN of power module inside of cabinet
- EPO & REPO function

Compatible with generator

- Power Walk In function, it can reduce the start current impact to system, and it can reduce the capacity of generator

HPM3300E Modular Series

Technical Specifications:

Module Model		HPM3300E-RM-50						
Cabinet Model		HPM3300E-200	HPM3300E-300	HPM3300E-400	HPM3300E-500	HPM3300E-600	HPM3300E-800	HPM3300E-1000
Cabinet capacity (VA)		200k	300k	400k	500k	600k	800k	1000k
Module capacity (VA)		50k						
Max. number		4	6	8	10	12	16	20
INPUT								
Nominal voltage		380/400/415Vac, (3Ph+N+PE)						
Operating voltage range		138-305Vac for 40% Load; 305-485Vac for 100% Load;						
Operating frequency range		40Hz-70Hz						
Power factor		≥0.99						
Harmonic distortion (THDi)		≤3% (100% linear load)						
Bypass voltage range		Max. voltage : 220V : +25% (optional+10%, +15%, +20%); 230V : +20% (optional +10%, +15%); 240V : +15% (optional +10%) Min. voltage : -45% (optional-10%, -15%, -20%, -30%)						
Bypass frequency tracking range		±10%						
Power walk in		Support						
Generator input		Support						
OUTPUT								
Rated voltage		380/400/415Vac, (3Ph+N+PE)						
Power factor		1.0						
Voltage regulation		±1%						
Output frequency	Line mode	Synchronize with input, when the input frequency > ±10% (±1%/±2%/±4%/±5% optional), output 50/60 (±0.1Hz)						
	Bat. mode	(50/60±0.1%)Hz						
Crest factor		3:1						
Harmonic distortion (THDv)		≤2% with linear load; ≤4% with nonlinear load						
Efficiency		up to 96%						
BATTERY								
Battery voltage	VRLA battery	360Vdc~600Vdc (30~50pcs continuously adjustable, 30pcs default, 36~50pcs no power derating; 32~35pcs output power factor 0.9; 30/31pcs output power factor 0.8)						
	Lithium battery	512Vdc						
Power module charge current		20A (Max.)						
SYSTEM FEATURES								
Transfer time		Utility to Battery : 0ms; Utility to bypass: 0ms						
Overload	Inverter mode	≤110% 60min, ≤125% 10min, ≤150% 1min, >150% 1.2s shut down inverter						
	Bypass mode	30°C : 135% for long term; 40°C : 125% for long term; >1000%, 100ms						
Overheat		Line Mode : Switch to Bypass; Backup Mode : Shut down UPS immediately						
Low battery voltage		Alarm and Switch off						
Self-diagnostics		Upon Power On and Software Control						
Backfeed protection		Support						
EPO (optional)		Shut down UPS immediately (turn to bypass optional)						
Battery		Advanced Battery Management						
Noise suppression		Complies with EN62040-3						
Audible & visual alarms		Line Failure, Battery Low, Overload, System Fault						
Status LED & LCD display		Line Mode, Bypass Mode, Battery Low, Battery Fault, Overload & UPS Fault						
Reading on the LCD display		Input, Output, Battery, Command, Setting, Maintenance						
Communication interface		RS232, RS485, Parallel, LBS, BMS, Dry contact port, Relay card(optional), SNMP card(optional), Battery temperature sensor(optional)						
ENVIRONMENTAL								
Operating temperature		0°C~40°C						
Storage temperature		-25°C~55°C						
Humidity range		0~95% (non condensing)						
Altitude		<1500m, derating required when >1500m						
Noise level		<65dB	<66dB	<68dB	<70dB	<70dB	<73dB	<73dB
PHYSICAL								
Dimension	UPS cabinet (S)	600×850×2000		600×850×2000	1200×850×2000		2000×850×2000	
W×D×H (mm)	UPS cabinet (F)			1200×850×2000				
	Power module	440×620×130						
Net weight (kg)	UPS cabinet	270	290	310/470	650	720	980	1080
	Power module	34						
STANDARDS								
Safety		IEC/EN62040-1, IEC/EN62477-1						
EMC		IEC/EN62040-2 (IEC61000-4-2, IEC61000-4-3, IEC61000-4-4, IEC61000-4-5, IEC61000-4-6, IEC61000-4-8)						

Specifications are subject to change without prior notice.

S: Without or only with one maintenance bypass breaker

F: With mains, bypass, maintenance bypass and output breakers

HPM3300E Modular Series

Technical Specifications:

Module Model		HPM3300E-RM-60					
Cabinet Model		HPM3300E-300	HPM3300E-480	HPM3300E-600	HPM3300E-840	HPM3300E-1080	HPM3300E-1200
Cabinet capacity (VA)		300k	480k	600k	840k	1080k	1200k
Module capacity (VA)		60k					
Max. number		5	8	10	14	18	20
INPUT							
Nominal voltage		380/400/415Vac, (3Ph+N+PE)					
Operating voltage range		138~305Vac for 40% Load; 305~485Vac for 100% Load;					
Operating frequency range		40Hz-70Hz					
Power factor		≥0.99					
Harmonic distortion (THDi)		≤3% (100% linear load)					
Bypass voltage range		Max. voltage : 220V : +25% (optional+10%, +15%, +20%); 230V : +20% (optional +10%, +15%); 240V : +15% (optional +10%) Min. voltage : -45% (optional-10%, -15%, -20%, -30%)					
Bypass frequency tracking range		±10%					
Power walk in		Support					
Generator input		Support					
OUTPUT							
Rated voltage		380/400/415Vac, (3Ph+N+PE)					
Power factor		1.0					
Voltage regulation		±1%					
Output frequency		Synchronize with input, when the input frequency > ±10% (±1%/±2%/±4%/±5% optional), output 50/60 (±0.1Hz)					
Crest factor		3:1					
Harmonic distortion (THDv)		≤2% with linear load; ≤4% with nonlinear load					
Efficiency		up to 96%					
BATTERY							
Battery voltage		VRLA battery 360Vdc~600Vdc (30~50pcs continuously adjustable, 30pcs default, 36~50pcs no power derating; 32~35pcs output power factor 0.9; 30/31pcs output power factor 0.8)					
		Lithium battery 512Vdc					
Power module charge current		20A (Max.)					
SYSTEM FEATURES							
Transfer time		Utility to Battery : 0ms; Utility to bypass: 0ms					
Overload		Inverter mode ≤110% 60min, ≤125% 10min, ≤150% 1min, >150% 1.2s shut down inverter Bypass mode 30°C : 135% for long term; 40°C : 125% for long term; >100%, 100ms					
Overheat		Line Mode : Switch to Bypass; Backup Mode : Shut down UPS immediately					
Low battery voltage		Alarm and Switch off					
Self-diagnostics		Upon Power On and Software Control					
Backfeed protection		Support					
EPO (optional)		Shut down UPS immediately (turn to bypass optional)					
Battery		Advanced Battery Management					
Noise suppression		Complies with EN62040-3					
Audible & visual alarms		Line Failure, Battery Low, Overload, System Fault					
Status LED & LCD display		Line Mode, Bypass Mode, Battery Low, Battery Fault, Overload & UPS Fault					
Reading on the LCD display		Input, Output, Battery, Command, Setting, Maintenance					
Communication interface		RS232, RS485, Parallel, LBS, BMS, Dry contact port, Relay card(optional), SNMP card(optional), Battery temperature sensor(optional)					
ENVIRONMENTAL							
Operating temperature		0°C~40°C					
Storage temperature		-25°C~55°C					
Humidity range		0~95% (non condensing)					
Altitude		<1500m, derating required when >1500m					
Noise level		<66dB	<70dB			<73dB	
PHYSICAL							
Dimension W×D×H (mm)		UPS cabinet (S) 600×850×2000 UPS cabinet (F) Power module	1200×850×2000		2000×850×2000		2200×850×2000
		440×620×130					
Net weight (kg)		UPS cabinet 290	650	720	980	1080	1200
		Power module 34					
STANDARDS							
Safety		IEC/EN62040-1, IEC/EN62477-1					
EMC		IEC/EN62040-2 (IEC61000-4-2, IEC61000-4-3, IEC61000-4-4, IEC61000-4-5, IEC61000-4-6, IEC61000-4-8)					

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S: Without or only with one maintenance bypass breaker

F: With mains, bypass, maintenance bypass and output breakers

HPM3300E-T Series

Online Transformerless UPS series

Mode: 3 phase input and 3 phase output

Power range : 200~1200kVA (3-Level PF: 1.0)



High reliability

- Wide input voltage range, line voltage range is 138-485V, UPS will derate to 40% when input voltage is below 305V
- Thickened conformal coating, applicable for harsh environment such as high heat, high humidity, dust, salt spray

Green and power saving

- High input power factor, it is up to 0.99
- 3-level topology design, efficiency is up to 96%
- THDi<3% (100% linear load)
- The UPS will work in sleeping mode when the load is very small

LBS function

- LBS function can realize 2 independent UPS system work in synchronization, and it enhances the reliability of the system

Compatible with generator

- Power Walk In function, it can reduce the start current impact to system, and it can reduce the capacity of generator

Intelligent management

- With 7 inches (standard) and 10 inches (optional) colorful touch LCD screen
- Support recording and exporting history logs and fault logs
- Support SNMP, RS232, RS485, BMS, Dry contact interface

VRLA&Lithium battery supportable

- VRLA battery number of each group can be selected from 30pcs to 50pcs (continuously adjustable)
- Match with Kstar KLi series lithium battery rack, providing higher power density, lower footprint and longer cycle life
- Configuration of VRLA or Lithium can be chose from LCD
- Two wire connection, simplify the construction on site and save the cost of battery neutral cable

Parallel redundancy function

- Support parallel expanded operation: maximum is 8 units
- Support sharing batteries for the UPS in parallel

Strong load capacity

- Output power factor is 1.0, UPS can supply power to 100% unbalanced load
- High adaptability for load, it can connect full inductive load or capacitive load

HPM3300E-T Series

Technical Specifications:

Model	HPM3300E-200-T	HPM3300E-250-T	HPM3300E-300-T	HPM3300E-400-T
Capacity (VA)	200k	250k	300k	400k
INPUT				
Nominal voltage	380/400/415Vac, (3Ph+N+PE)			
Operating voltage range	138~305Vac for 40% Load; 305~485Vac for 100% Load;			
Operating frequency range	40Hz-70Hz			
Power factor	≥0.99			
Harmonic distortion (THDi)	≤3% (100% linear load)			
Bypass voltage range	Max. voltage : 220V : +25% (optional+10%, +15%, +20%); 230V : +20% (optional +10%, +15%); 240V : +15% (optional +10%) Min. voltage : -45% (optional-10%, -15%, -20%, -30%)			
Bypass frequency tracking range	±10%			
Power walk in	Support			
Generator input	Support			
OUTPUT				
Rated voltage	380/400/415Vac, (3Ph+N+PE)			
Power factor	1.0			
Voltage regulation	±1%			
Output frequency	Synchronize with input, when the input frequency > ±10% (±1%/±2%/±4%/±5% optional), output 50/60 (±0.1Hz)			
Line mode				
Bat. mode	(50/60±0.1%)Hz			
Crest factor	3:1			
Harmonic distortion (THDv)	≤2% with linear load; ≤4% with nonlinear load			
Efficiency	up to 96%			
BATTERY				
Battery voltage	VRLA battery	360Vdc~600Vdc (30~50pcs continuously adjustable, 30pcs default, 36~50pcs no power derating; 32~35pcs output power factor 0.9; 30/31pcs output power factor 0.8)		
	Lithium battery	512Vdc		
Power module charge current	80A (Max.)	100A (Max.)		140A (Max.)
SYSTEM FEATURES				
Transfer time	Utility to Battery : 0ms; Utility to bypass: 0ms			
Overload	Inverter mode	≤110% 60min, ≤125% 10min, ≤150% 1min, >150% 1.2s shut down inverter		
	Bypass mode	30°C : 135% for long term; 40°C : 125% for long term; >1000%, 100ms		
Overheat	Line Mode : Switch to Bypass; Backup Mode : Shut down UPS immediately Alarm and Switch off			
Low battery voltage	Upon Power On and Software Control			
Self-diagnostics	Support			
Backfeed protection	Shut down UPS immediately (turn to bypass optional)			
EPO (optional)	Advanced Battery Management			
Battery	Complies with EN62040-3			
Noise suppression	Line Failure, Battery Low, Overload, System Fault			
Audible & visual alarms	Line Mode, Bypass Mode, Battery Low, Battery Fault, Overload & UPS Fault			
Status LED & LCD display	Input, Output, Battery, Command, Setting, Maintenance			
Reading on the LCD display	RS232, RS485, Parallel, LBS, BMS, Dry contact port, Relay card(optional), SNMP card(optional), Battery temperature sensor(optional)			
Communication interface				
ENVIRONMENTAL				
Operating temperature	0°C~40°C			
Storage temperature	-25°C~55°C			
Humidity range	0~95% (non condensing)			
Altitude	<1500m, derating required when >1500m			
Noise level	<63dB		<65dB	<70dB
PHYSICAL				
Dimension	S	600×850×200		
W×D×H (mm)	F			
Net weight (kg)	406	440	460	548
STANDARDS				
Safety	IEC/EN62040-1, IEC/EN62477-1			
EMC	IEC/EN62040-2 (IEC61000-4-2, IEC61000-4-3, IEC61000-4-4, IEC61000-4-5, IEC61000-4-6, IEC61000-4-8)			

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S : Without or only with one maintenance bypass breaker

F : With mains, bypass, maintenance bypass and output breakers

HPM3300E-T Series

Technical Specifications:

Model	HPM3300E-500-T	HPM3300E-600-T	HPM3300E-800-T	HPM3300E-1000-T	HPM3300E-1200-T
Capacity (VA)	500	600	800k	1000k	1200k
INPUT					
Nominal voltage	380/400/415Vac, (3Ph+N+PE)				
Operating voltage range	138~305Vac for 40% Load; 305~485Vac for 100% Load;				
Operating frequency range	40Hz-70Hz				
Power factor	≥0.99				
Harmonic distortion (THDi)	≤3% (100% linear load)				
Bypass voltage range	Max. voltage : 220V : +25% (optional+10%, +15%, +20%); 230V : +20% (optional +10%, +15%); 240V : +15% (optional +10%) Min. voltage : -45% (optional-10%, -15%, -20%, -30%)				
Bypass frequency tracking range	±10%				
Power walk in	Support				
Generator input	Support				
OUTPUT					
Rated voltage	380/400/415Vac, (3Ph+N+PE)				
Power factor	1.0				
Voltage regulation	±1%				
Output frequency	Synchronize with input, when the input frequency > ±10% (±1%/±2%/±4%/±5% optional), output 50/60 (±0.1Hz)				
Crest factor	3:1				
Harmonic distortion (THDv)	≤2% with linear load; ≤4% with nonlinear load				
Efficiency	up to 96%				
BATTERY					
Battery voltage	VRLA battery	360Vdc~600Vdc (30~50pcs continuously adjustable, 30pcs default, 36~50pcs no power derating; 32~35pcs output power factor 0.9; 30/31pcs output power factor 0.8)			
	Lithium battery	512Vdc			
Power module charge current	180A (Max.)	200A (Max.)	280A (Max.)	360A (Max.)	400A (Max.)
SYSTEM FEATURES					
Transfer time	Utility to Battery : 0ms; Utility to bypass: 0ms				
Overload	Inverter mode	≤110% 60min, ≤125% 10min, ≤150% 1min, >150% 1.2s shut down inverter			
	Bypass mode	30°C : 135% for long term; 40°C : 125% for long term; >1000%, 100ms			
Overheat	Line Mode : Switch to Bypass; Backup Mode : Shut down UPS immediately				
Low battery voltage	Alarm and Switch off				
Self-diagnostics	Upon Power On and Software Control				
Backfeed protection	Support				
EPO (optional)	Shut down UPS immediately (turn to bypass optional)				
Battery	Advanced Battery Management				
Noise suppression	Complies with EN62040-3				
Audible & visual alarms	Line Failure, Battery Low, Overload, System Fault				
Status LED & LCD display	Line Mode, Bypass Mode, Battery Low, Battery Fault, Overload & UPS Fault				
Reading on the LCD display	Input, Output, Battery, Command, Setting, Maintenance				
Communication interface	RS232, RS485, Parallel, LBS, BMS, Dry contact port, Relay card(optional), SNMP card(optional), Battery temperature sensor(optional)				
ENVIRONMENTAL					
Operating temperature	0°C~40°C				
Storage temperature	-25°C~55°C				
Humidity range	0~95% (non condensing)				
Altitude	<1500m, derating required when >1500m				
Noise level	<70dB	<73dB		<74dB	
PHYSICAL					
Dimension	S	1200×850×2000		2000×850×2000	
W×D×H (mm)	F				
Net weight (kg)		956	1060	1422	1658
STANDARDS					
Safety	IEC/EN62040-1, IEC/EN62477-1				
EMC	IEC/EN62040-2 (IEC61000-4-2, IEC61000-4-3, IEC61000-4-4, IEC61000-4-5, IEC61000-4-6, IEC61000-4-8)				

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S : Without or only with one maintenance bypass breaker

F : With mains, bypass, maintenance bypass and output breakers

KLi Lithium-ion Battery System



Product features

- Professional lithium pack team and automated product line, providing more reliable products and delivering higher adaptability to UPS operating characteristics
- Three-level intelligent BMS with multiple protection and communication functions, ensuring reliability and meeting the requirements for remote real-time monitoring
- Equipped with intelligent monitoring present to display battery real-time information
- Two-level fire protection of cabinet and module ensures the safety of data center
- Prolonged service life up to 15 years, more than 3500 cycles of cycle life
- Modular design, with most models supporting the parallel use of multiple modules, parallel cabinet number up to 12, offering more flexible autonomy time selection
- Maintenance free, reducing maintenance costs

Comparison of LFP and VRLA

Items Battery Type	Volume	Footprint	Weight	Cycle life	Operating temperature	Intelligent monitoring
LFP	3m ³	1.5m ²	2500kg	>2000	-20~65°C	Three-level BMS
VRLA	10m ³	6m ²	10000kg	<500	0~40°C	Need extra battery monitoring module

*Volume, footprint and weight are based on 400kW load@20mins backup time.

KLi Lithium-ion Battery System

Technical Specifications:

MODEL	KLi-512100C01	KLi-512100C04
CELL PARAMETERS		
Cell material	LiFeO ₄	
Nominal voltage (Vdc)	3.2	
Nominal capacity (Ah)	100	25
BATTERY SYSTEM PARAMETERS		
Nominal voltage (Vdc)	512	
Nominal capacity (Ah)	100	
Cell series/parallel connections	160S1P	160S4P
Nominal energy (Wh)	51200	
Maximum continuous discharge current (A)	100	400
Peak discharge current (A)	160A/3S	450A/3S
Maximum continuous charge current (A)	100	
Recommended charge current (A)	≤50	
Maximum continuous output power (kW)	51.2	204
Normal charge voltage (Vdc)	584	
Float charge voltage (Vdc)	544	
End-of-discharge voltage (Vdc)	432	
Typical calendar life	5-15 years, depending on surrounding environment and use	
Typical cycle life	2000 cycles (80% DOD), 3500 cycles (50% DOD), depending on surrounding environment and use	
Protection function	High/low cell voltage protection, high/low battery module voltage protection, charge/discharge over-current protection, high/low charge temperature protection, high/low discharge temperature protection, short-circuit protection, equilibrium temperature; etc.	
Communication interface	RS485, Dry contact, CAN	
Indicator	Alarm, operation, relay status, charge level display	
Heat management method	Natural heat dissipation	Natural heat dissipation&Fan heat dissipation
ENVIRONMENTAL		
Operating temperature (°C)	Charge : 0 ~ 45; discharge: -20 ~ 65	Charge : 0 ~ 55; discharge: -20 ~ 65
Operating humidity (%)	Relative humidity 0~90 (no condensation)	
Storage temperature (°C)	-20 ~45 (short-term storage), -10~25 (long-term storage), @50% charge level	
Storage humidity (%)	Relative humidity 0~90 (non condensing)	
Altitude requirement (m)	≤2000	
PHYSICAL		
System dimension W×D×H (mm)	600×850×2000	
System weight (kg)	780	845
COMPLIANCE		
Referential standards	IEC62619, IEC62133, UL1642, Battery Directive 2013/56/EU, UN38.3, RoHS	
Safety	IEC/EN62477-1	
EMC	IEC/EN61000	



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