

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) (50/60±0.1%)Hz						
	Bat. mode							
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							
Power module charge current		512Vdc 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 30℃ : 135% for long term; 40℃ : 125% for long term; >1000%, 100ms Line Mode : Switch to Bypass; Backup Mode : Shut down UPS immediately						
	Bypass mode							
Overheat		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								
Communication interface		RS232, RS485, Parallel, LBS, BMS, Dry contact port, Relay card(optional), SNMP card(optional), Battery temperature sensor(optional)						
ENVIRONMENTAL								
Operating temperature		0℃~40℃						
Storage temperature		-25℃~55℃						
Humidity range		0~95% (non condensing)						
Altitude		<1500m, derating required when >1500m						
Noise level		<65dB	<66dB	<68dB	<70dB		<73dB	
PHYSICAL								
Dimension W×D×H (mm)	UPS cabinet (S)	600×850×2000		600×850×2000	1200×850×2000		2000×850×2000	
	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	Line mode	Synchronize with input, when the input frequency > ±10% (±1%/±2%/±4%/±5% optional), output 50/60 (±0.1Hz)					
	Bat. mode						
Crest factor		(50/60±0.1%)Hz					
		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						
Power module charge current		512Vdc 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 30°C : 135% for long term; 40°C : 125% for long term; >1000%, 100ms Line Mode : Switch to Bypass; Backup Mode : Shut down UPS immediately					
	Bypass mode						
Overheat		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		<66dB	<70dB			<73dB	
PHYSICAL							
Dimension W×D×H (mm)	UPS cabinet (S)	600×850×2000	1200×850×2000		2000×850×2000		2200×850×2000
	UPS cabinet (F)						
	Power module	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)					

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-T Series

Online Transformerless UPS series

Mode: 3 phase input and 3 phase output

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

