KSTAR

Online Transformerless UPS Series

– Medium to large power capacity –

COMPANY PROFILE

Founded in 1993, Shenzhen KSTAR Science & Technology Co., Ltd (Stock Code: 002518) is a National Torch Plan Key High-tech Enterprise, and also a pioneer of UPS industry and a total solution provider for Data Center Critical Infrastructure & Photovoltaic Inverter Systems in Mainland China. KSTAR is fully committed to the R&D and has been providing high-quality products with full service to over 150 countries and regions worldwide, leading the industrial development with innovation.

ISO9001

ISO14001

OHSAS18001

IECQ QC080000

Glonal Service Network

7 × 24 Response and Support

31 Domestic Service Centers
172 Domestic Service Stations

National Customer Service Hotline:
400-700-9662

17 Overseas Technical Service Centers
40 Overseas Service Engineers

KSTAR Industrial Park at Guangming industrial Zone,Shenzhen,China

KSTAR Industrial Park at Zhongkai Hi-Tech Zone,Huizhou,China

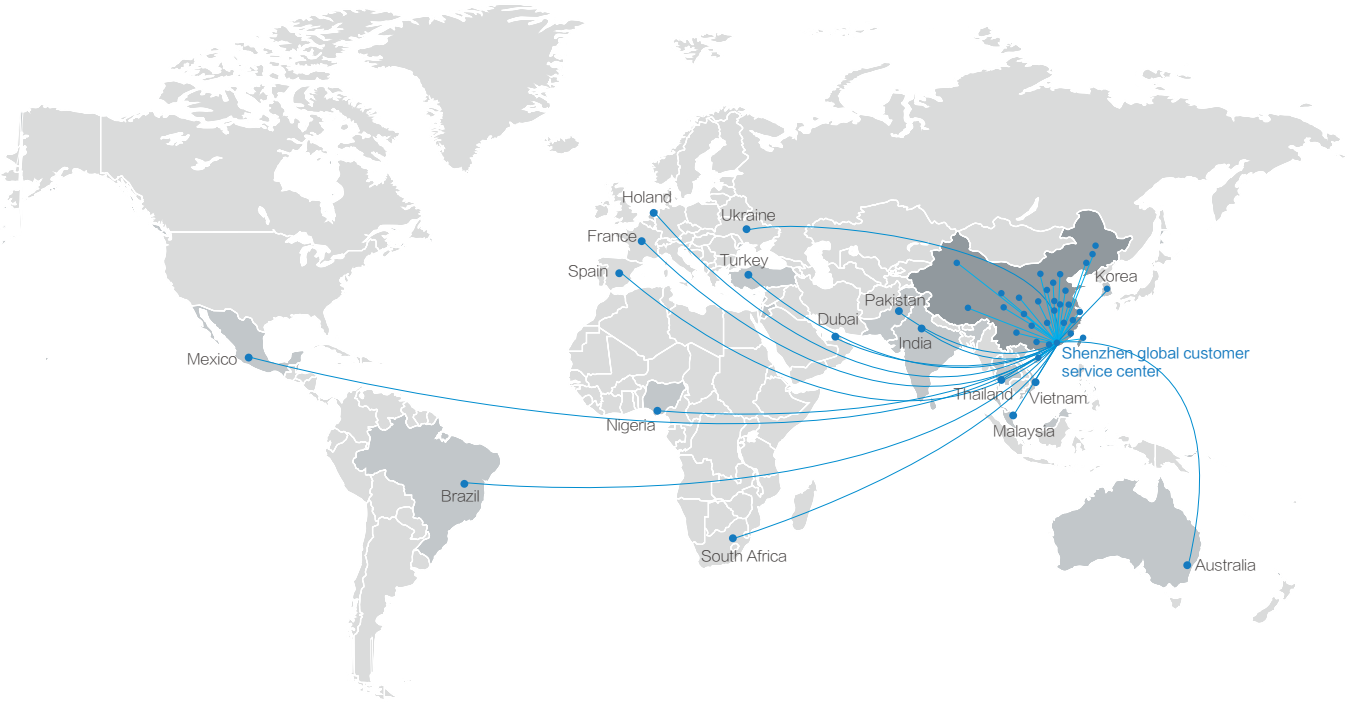
KSTAR Industrial Park at Guanlan Fuyuan industrial Zone,Shenzhen,China

KSTAR headquarters Software Park,Keji C.Rd.2nd,Hi-Tech industrial Zone,Shenzhen,China

CATL-KSTAR SCIENCE & & TECHNOLOGY CO., LTD.

Jiangxi Changxin Golden Sunshine Power Supply Co. LTD.

KSTAR Industrial Park at Guangming Hi-Tech Zone, Shenzhen, China



YDC3300 Series

Online Transformerless UPS series
Power range : 50～200kVA (3-Level PF: 1.0)

Mode: 3 phase input and 3 phase output

High reliability design

- Wide input voltage range 138-485Vac (Phase voltage 80-280Vac), no derating when input voltage ≥ 305Vac

Power saving

- High input power factor, it can be up to 0.99
- 3-level inverter topology, the efficiency can be up to 95.5%

Parallel redundancy function

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

Flexible battery configuration

- Batteries number of each group can be selected from 30 pieces to 50 pieces
- Large charging current can meet the requirement of long time backup

Strong load capacity

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

Compatible with generator

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

LBS function

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

Intelligent management

- Support USB, RS485, RS232, SNMP, dry contact card

Technical Specifications:

MODEL	YDC3350H	YDC3360H	YDC3380H	YDC33100H	YDC33120H	YDC33150H	YDC33160H	YDC33180H	YDC33200H
Capacity	50kVA	60kVA	80kVA	100kVA	120kVA	150kVA	160kVA	180kVA	200kVA
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	40 ~ 70Hz (50/60Hz Auto-Sensing)								
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%)								
Frequency protection range	50/60Hz ± 10%								
Generator input	Support								
OUTPUT									
Output voltage	380/400/415Vac (3Ph + N + PE)								
Voltage regulation	± 1%								
Power factor	1.0								
Output frequency — Line mode	Synchronize with input, when the input frequency > ± 10% (± 1%/ ± 2%/ ± 4%/ ± 5% optional), output 50/60 (± 0.1Hz)								
Output frequency — Bat. mode	(50/60 ± 0.2%)Hz								
Crest factor	3:1								
Harmonic distortion (THDv)	≤2% with linear load; ≤4% with non linear load								
Overload — Inverter mode	≤110% 60min, ≤125% 10min, ≤150% 1min, >150% 1.2s shut down inverter								≤110% 60min, ≤125% 1min, >125% 1.2s shut down inverter
Overload — Bypass mode	30℃: 135% for long term; 40℃: 125% for long term; >1000%, 100ms								
EFFICIENCY									
Efficiency	up to 95.5%								
BATTERY									
Battery voltage	± 180/192/204/216/228/240/252/264/276/288/300Vdc (30/32/34/36/38/40/42/44/46/48/50pcs, 36pcs default, 36~50pcs output power factor 1.0, 32~34pcs output power factor 0.9, 30pcs output power factor 0.8)								
Charge Current	20A (Max.)		40A (Max.)			60A (Max.)			
SYSTEM FEATURES									
Transfer time	Utility to Battery: 0ms; Utility to Bypass: 0ms								
Backfeed protection	Support								
Alarm	Overload, utility abnormal, UPS fault, battery low, etc								
Protection	Short circuit, overload, over temperature, battery low, fan fault alarm								
Remote LCD	Support								
Communication	USB, RS232, RS485, parallel port, dry contact, intelligent slot, LBS, SNMP card (Optional), relay card (Optional)								
ENVIRONMENTAL									
Operating temperature	0℃ ~ 40℃								
Storage temperature	-25℃ ~ 55℃ (No battery)								
Humidity range	0 ~ 95% (Non condensing)								
Altitude	< 1500m, derating required when > 1500m								
Noise level	< 55dB	< 58dB	< 60dB	< 62dB		< 63dB		< 64dB	< 66dB
PHYSICAL									
Dimension W × D × H	250 × 828 × 868mm		442 × 850 × 1200mm						
Net weight	80kg	83kg	140kg	160kg	170kg	200kg	205kg	215kg	220kg
STANDARDS									
Safety	IEC/EN 62040-1, IEC/EN 62477-1								
EMC	IEC/EN 62040-2 (IEC 61000-2-2, IEC 61000-4-2, IEC 61000-4-3, IEC 61000-4-4, IEC 61000-4-5, IEC 61000-4-6, IEC 61000-4-8, IEC 61000-4-11)								

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HPM3300E Subrack Modular Series

Online Transformerless UPS series
Power range : 10 ~ 150kVA (3-Level PF: 1.0)

Mode: 3 phase input and 3 phase output
Module: 10/15/20/25/30/40/50kVA

Stand-alone installation
with wheels as standard,
for easy movement.

Rack-mounted installation
compact design,
saving valuable unit space.

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

Parallel redundancy function

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

Flexible battery configuration

- Batteries number of each group can be selected from 30 pieces to 50 pieces
- Large charging current can meet the requirement of long time backup

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, Dry contact interface
- Support upgrading FW&SW on line
- 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 Subrack Modular Series

Technical Specifications:

Module Model	HPM3300E-RM-10		
Cabinet Model	HPM3300E-20	HPM3300E-40	HPM3300E-60
Cabinet capacity	10kVA~20kVA	10kVA~40kVA	10kVA~60kVA
Module capacity	10kVA		
Max. number	2	4	6
Module Model	**HPM3300E-RM-15**		
Cabinet Model	HPM3300E-30	HPM3300E-60	HPM3300E-90
Cabinet capacity	15kVA~30kVA	15kVA~60kVA	15kVA~90kVA
Module capacity	15kVA		
Max. number	2	4	6
Module Model	**HPM3300E-RM-20**		
Cabinet Model	HPM3300E-40	HPM3300E-80	HPM3300E-120
Cabinet capacity	20kVA~40kVA	20kVA~80kVA	20kVA~120kVA
Module capacity	20kVA		
Max. number	2	4	6
Module Model	**HPM3300E-RM-25**		
Cabinet Model	HPM3300E-50	HPM3300E-100	HPM3300E-150
Cabinet capacity	25kVA~50kVA	25kVA~100kVA	25kVA~150kVA
Module capacity	25kVA		
Max. number	2	4	6
Module Model	**HPM3300E-RM-30**		
Cabinet Model	HPM3300E-60	HPM3300E-120	HPM3300E-150
Cabinet capacity	30kVA~60kVA	30kVA~120kVA	30kVA~150kVA
Module capacity	30kVA		
Max. number	2	4	5+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	Frequency protection 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)		
Output frequency — Bat. mode	(50/60±0.1%)Hz		
Crest factor	3:1		
Harmonic distortion (THDv)	≤1% with linear load; ≤3% with nonlinear load		
Efficiency	up to 95.8%		
BATTERY			
Battery voltage	±180/192/204/216/228/240/252/264/276/288/300Vdc (30/32/34/36/38/40/42/44/46/48/50pcs, 36pcs default, 36~50pcs output power factor 1.0, 32~34pcs output power factor 0.9, 30pcs output power factor 0.8)		
Power module charge current	18A (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		
Overload — Bypass mode	30℃: 135% for long term; 40℃: 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, 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	<58dB	<60dB	<62dB
PHYSICAL			
Dimension W×D×H — UPS cabinet	485×850×353mm (8U)	485×850×575mm (13U)	485×850×752mm (17U)
Dimension W×D×H — Power module	440×620×86mm (2U)		
Net weight — UPS cabinet	69kg	79kg	98kg
Net weight — Power module	10kVA: 19kg; 15~30kVA: 21kg		
STANDARDS			
Safety	IEC/EN 62040-1, IEC/EN 62477-1		
EMC	IEC/EN 62040-2 (IEC 61000-2-2, IEC 61000-4-2, IEC 61000-4-3, IEC 61000-4-4, IEC 61000-4-5, IEC 61000-4-6, IEC 61000-4-8, IEC 61000-4-11)		

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HPM3300E Subrack Modular Series

Technical Specifications:

Module Model		HPM3300E-RM-40		HPM3300E-RM-50	
Cabinet Model		HPM3300E-80	HPM3300E-120	HPM3300E-100	HPM3300E-150
Cabinet capacity		40kVA~80kVA	40kVA~120kVA	50kVA~100kVA	50kVA~150kVA
Module capacity		40kVA		50kVA	
Max. number		2+1	3	2+1	3
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		Frequency protection 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)		≤1% with linear load; ≤3% with nonlinear load			
Efficiency		up to 96%			
BATTERY					
Battery voltage		±180/192/204/216/228/240/252/264/276/288/300Vdc (30/32/34/36/38/40/42/44/46/48/50pcs, 36pcs default, 36~50pcs output power factor 1.0, 32~34pcs output power factor 0.9, 30pcs output power factor 0.8)			
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℃: 135% for long term; 40℃: 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, 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		<56dB	<58dB	<60dB	<62dB
PHYSICAL					
Dimension W×D×H	UPS cabinet	485×850×620mm (14U)			
	Power module	440×620×130mm (3U)			
Net weight	UPS cabinet	103kg		113kg	
	Power module	32kg		34kg	
STANDARDS					
Safety		IEC/EN 62040-1, IEC/EN 62477-1			
EMC		IEC/EN 62040-2 (IEC 61000-2-2, IEC 61000-4-2, IEC 61000-4-3, IEC 61000-4-4, IEC 61000-4-5, IEC 61000-4-6, IEC 61000-4-8, IEC 61000-4-11)			

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HPM3300E Modular Series

Online Transformerless UPS series
Power range : 10～150kVA (3-Level PF: 1.0)

Mode: 3 phase input and 3 phase output
Module: 10/15/20/25/30kVA

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 95.8%
- 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

Parallel redundancy function

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

Flexible battery configuration

- Batteries number of each group can be selected from 30 pieces to 50 pieces
- Large charging current can meet the requirement of long time backup

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

- 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, Dry contact interface
- Support upgrading FW&SW on line
- 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

Technical Specifications:

Module Model	HPM3300E-RM-10	
Cabinet Model	HPM3300E-30	HPM3300E-50
Cabinet capacity	30kVA	50kVA
Module capacity	10kVA	
Max. number	3	5
Module Model	HPM3300E-RM-15	
Cabinet Model	HPM3300E-45	HPM3300E-75
Cabinet capacity	45kVA	75kVA
Module capacity	15kVA	
Max. number	3	5
Module Model	HPM3300E-RM-20	
Cabinet Model	HPM3300E-60	HPM3300E-100
Cabinet capacity	60kVA	100kVA
Module capacity	20kVA	
Max. number	3	5
Module Model	HPM3300E-RM-25	
Cabinet Model	HPM3300E-50	HPM3300E-125
Cabinet capacity	50kVA	125kVA
Module capacity	25kVA	
Max. number	2+1 (Redundancy)	5
Module Model	HPM3300E-RM-30	
Cabinet Model	HPM3300E-60	HPM3300E-150
Cabinet capacity	60kVA	150kVA
Module capacity	30kVA	
Max. number	2+1 (Redundancy)	5
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	Frequency protection 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)	
Output frequency — Bat. mode	(50/60±0.1%)Hz	
Crest factor	3:1	
Harmonic distortion (THDv)	≤1% with linear load; ≤3% with nonlinear load	
Efficiency	up to 95.8%	
BATTERY		
Battery voltage	±180/192/204/216/228/240/252/264/276/288/300Vdc (30/32/34/36/38/40/42/44/46/48/50pcs, 36pcs default, 36~50pcs output power factor 1.0, 32~34pcs output power factor 0.9, 30pcs output power factor 0.8)	
Power module charge current	18A (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	
Overload — Bypass mode	30℃: 135% for long term; 40℃: 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, 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	< 58dB	< 61dB
PHYSICAL		
Dimension W × D × H — UPS cabinet	600 × 850 × 1200mm	
Dimension W × D × H — Power module	440 × 620 × 86mm (2U)	
Net weight — UPS cabinet	130kg~145kg	145kg~170kg
Net weight — Power module	10kVA: 19kg; 15~30kVA: 21kg	
STANDARDS		
Safety	IEC/EN 62040-1, IEC/EN 62477-1	
EMC	IEC/EN 62040-2 (IEC 61000-2-2, IEC 61000-4-2, IEC 61000-4-3, IEC 61000-4-4, IEC 61000-4-5, IEC 61000-4-6, IEC 61000-4-8, IEC 61000-4-11)	

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HPM3300E Modular Series

Online Transformerless UPS series
Power range : 40 ~ 1000kVA (3-Level PF: 1.0)

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

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

Parallel redundancy function

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

Flexible battery configuration

- Batteries number of each group can be selected from 30 pieces to 50 pieces
- Large charging current can meet the requirement of long time backup

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

- 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, Dry contact interface
- Support upgrading FW&SW on line
- 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

Technical Specifications:

Module Model		HPM3300E-RM-40	HPM3300E-RM-50
Cabinet Model		HPM3300E-200/320	HPM3300E-200/300/400/500/600/800/1000
Cabinet capacity		200kVA	200kVA ~ 1000kVA
Module capacity		40kVA	50kVA
Max. number		5/8	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 range		Frequency protection 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)		≤1% with linear load; ≤3% with nonlinear load	
Efficiency		up to 96%	
BATTERY			
Battery voltage		±180/192/204/216/228/240/252/264/276/288/300Vdc (30/32/34/36/38/40/42/44/46/48/50pcs, 36pcs default, 36 ~ 50pcs output power factor 1.0, 32 ~ 34pcs output power factor 0.9, 30pcs output power factor 0.8)	
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℃: 135% for long term; 40℃: 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, 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		<68dB	<73dB
PHYSICAL			
Dimension W×D×H	UPS cabinet (S/F)	200/320kVA: 600×850×2000mm	200/300/400kVA: 600×850×2000mm 500/600kVA: 1200×850×2000mm 800/1000kVA: 2000×850×2000mm
	Power module	440×620×130mm	
Net weight	UPS cabinet (S/F)	200kVA: 210kg; 320kVA: 270kg	200kVA: 240kg; 300kVA: 260kg; 400kVA: 290kg; 500kVA: 480kg; 600kVA: 540kg; 800kVA: 960kg; 1000kVA: 1050kg
	Power module	33kg	34kg
STANDARDS			
Safety		IEC/EN 62040-1, IEC/EN 62477-1	
EMC		IEC/EN 62040-2 (IEC 61000-2-2, IEC 61000-4-2, IEC 61000-4-3, IEC 61000-4-4, IEC 61000-4-5, IEC 61000-4-6, IEC 61000-4-8, IEC 61000-4-11)	

S: Without or only with one maintenance bypass breaker
F: With mains, bypass, maintenance bypass and output breakers
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HPM3300E-T Series

Online Transformerless UPS series
Power range : 200 ~ 1000kVA (3-Level PF: 1.0)

Mode: 3 phase input and 3 phase output

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

Parallel redundancy function

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

Flexible battery configuration

- Batteries number of each group can be selected from 30 pieces to 50 pieces
- Large charging current can meet the requirement of long time backup

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

- 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, Dry contact interface

Technical Specifications:

Model		HPM3300E-200-T	HPM3300E-250-T	HPM3300E-300-T	HPM3300E-400-T	HPM3300E-500-T	HPM3300E-600-T	HPM3300E-800-T	HPM3300E-1000-T
Capacity (VA)		200k	250k	300k	400k	500k	600k	800k	1000k
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		Frequency protection 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)		≤1% with linear load; ≤3% with nonlinear load							
Efficiency		up to 96%							
BATTERY									
Battery voltage		±180/192/204/216/228/240/252/264/276/288/300Vdc (30/32/34/36/38/40/42/44/46/48/50pcs, 36pcs default, 36~50pcs output power factor 1.0, 32~34pcs output power factor 0.9, 30pcs output power factor 0.8)							
Charging current		80A (Max.)	100A (Max.)		140A (Max.)	180A (Max.)	200A (Max.)	280A (Max.)	340A (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℃: 135% for long term; 40℃: 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, 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		<68dB		<70dB		<73dB	<75dB
PHYSICAL									
Dimension W×D×H	S	600×850×2000mm				1200×850×2000mm		2000×850×2000mm	
	F								
Net weight		360kg	400kg	480kg	530kg	800kg	890kg	1450kg	1600kg
STANDARDS									
Safety		IEC/EN 62040-1, IEC/EN 62477-1							
EMC		IEC/EN 62040-2 (IEC 61000-2-2, IEC 61000-4-2, IEC 61000-4-3, IEC 61000-4-4, IEC 61000-4-5, IEC 61000-4-6, IEC 61000-4-8, IEC 61000-4-11)							

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Add: CATL-KSTAR, XiaPu Economic Development Zone, FuJian, P.R. China
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Add: Kstar (Vietnam) Co., Ltd, in Anyang County, Haiphong City, Vietnam

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