# **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





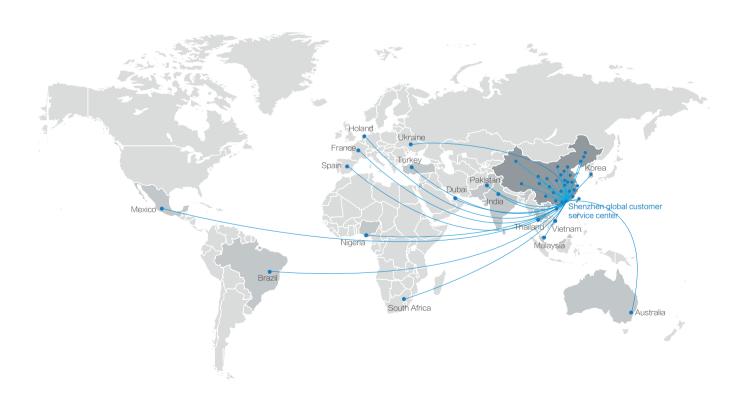












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### YDC3300 Series

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

	ai Specific		ADC3360H	ADC3300F	VDC22100H	VDC22120H	VDC22150H	VDC22160H	I VDC33400H	I VDC33300F
MODEL Capacity		YDC3350H 50kVA	60kVA	80kVA	100kVA	120kVA	YDC33150H 150kVA	160kVA	180kVA	200kVA
		JUNVA	OURVA	OUNVA	TOURVA	IZUNVA	ISOKVA	TOURVA	TOURVA	ZUUKVA
INPUT										
Nominal voltage					380/400	)/415Vac (3Ph+	N + PE)			
Operating volt	tage range			138		,	5Vac for 100% l	oad		
Operating frequ	uency range				40~70Hz	z (50/60Hz Auto-	-Sensing)			
Power factor			≥0.99							
Harmonic distortion (THDi)					≤39	% (100% linear l	oad)			
Bypass voltag	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 pro	otection range		50/60Hz ± 10%							
Generator inp	out					Support				
OUTPUT										
Output voltag	٩				380/400	)/415Vac (3Ph+	- N + PF)			
Voltage regula					300/400	± 1%	N 1 L)			
Power factor	ation					1.0				
	Line mode	Sv	nchronize with in	nout when the in	nout frequency :		/±2%/±4%/±5	% optional) out	nut 50/60 (±0	1Hz)
Output frequency	Bat. mode	- Oy	TIOTH OTHEO WILLTH	ipat, whom the in		(50/60 ± 0.2%)H		70 optional), oai	.pat 00/00 (= 0.	1112)
Crest factor	Dat. Mode					3:1	_			
Harmonic disto	ortion (THDv)				≤2% with linea		n non linear load			
Overload	Inverter mode		≤110%	% 60min, ≤125%	5 10min, ≤1509	% 1min, >150%	1.2s shut down	inverter		≤110% 60mi ≤125% 1min >125% 1.2s shut down inverter
	Bypass mode			30℃: 135%	for long term; 4	40°C: 125% for l	ong term; > 1000	0%, 100ms		
EFFICIENCY										
Efficiency						up to 95.5%				
BATTERY										
Battery voltag	e		± 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 Curre	nt	20A (	(Max.)	output porror ru	40A (Max.)	oo oaqaa porro	, radio, dio, dop.		(Max.)	
SYSTEM FEA			. ,		,				,	
Transfer time					Utility to Batte	rv: Oms: Litility to	n Bynass: 0ms			
Backfeed prof			Utility to Battery: 0ms; Utility to Bypass: 0ms Support							
Alarm	.00		Overload, utility abnormal, UPS fault, battery low, etc							
Protection			Short circuit, overload, over temperature, battery low, fan fault alarm							
Remote LCD			Support							
Communication	an .	USB, RS232, RS485, parallel port, dry contact, intelligent slot, LBS, SNMP card (Optional), relay card (Optional)								
ENVIRONME			000, 10202, 10	5465, parallel po	ort, dry cornact,	ii iteliigerit siot, L	.bo, orvivir caru	(Optional), rela	iy card (Optiona	11)
Operating ten						0°C - 40°C				
		0°C ~ 40°C −25°C ~ 55°C (No battery)								
Storage temperature Humidity range		-25 C ~ 55 C (No battery)  0 ~ 95% (Non condensing)								
Altitude		0~95% (Non condensing) <1500m, derating required when >1500m								
Noise level		<55dB	<58dB	<60dB		2dB		3dB	<64dB	<66dB
PHYSICAL		< 330D	< 36dB	<000D	\0	ZUD	<b>\</b> 0.	Jub	\04UD	< 000D
	5	05-								
Dimension W×D×H			3×868mm	1401:-	1601		12 × 850 × 1200m		94El.a	2201/5
Net weight		80kg	83kg	140kg	160kg	170kg	200kg	205kg	215kg	220kg
STANDARDS	5				IE 0 /Et : -	0040 4 150/5	100477			
Safety						2040-1, IEC/EN				
EMC			10-2 (IEC 61000-2 prior notice	-2, IEC 61000-4-2	2, IEC 61000-4-3	3, IEC 61000-4-4,	IEC 61000-4-5, IE	:C 61000-4-6, IE	C 61000-4-8, IEC	561000-4-11)

Specifications are subject to change without prior notice
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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

	Specifications	·· <u> </u>						
Module Mod	lel		HPM3300E-RM-10					
Cabinet Mod	del I	HPM3300E-20	HPM3300E-40	HPM3300E-60				
Cabinet capac		10kVA~20kVA	10kVA~40kVA	10kVA~60kVA				
Module capaci			10kVA					
Max. number		2	4	6				
Module Mod	lel		HPM3300E-RM-15					
Cabinet Mod	del I	HPM3300E-30	HPM3300E-60	HPM3300E-90				
Cabinet capac		15kVA~30kVA	15kVA~60kVA	15kVA~90kVA				
Module capaci	ity		15kVA					
Max. number		2	4	6				
Module Mod	lel		HPM3300E-RM-20					
Cabinet Mod	del I	HPM3300E-40	HPM3300E-80	HPM3300E-120				
Cabinet capac		20kVA~40kVA	20kVA~80kVA	20kVA~120kVA				
Module capaci		201177	20kVA	201(1)( 1201(1)(				
∕lax. number		2	4	6				
Module Mod	lel		HPM3300E-RM-25					
			1					
Cabinet Mod		HPM3300E-50	HPM3300E-100	HPM3300E-150				
Cabinet capac		25kVA~50kVA	25kVA~100kVA	25kVA~150kVA				
√lodule capaci √lax. number		2	25kVA 4	6				
Module Mod		2	HPM3300E-RM-30	U				
		LID140000E 00	· · · · · · · · · · · · · · · · · · ·	LIDM0000E 450				
Cabinet Mod Cabinet capac		HPM3300E-60	HPM3300E-120	HPM3300E-150				
Cabinet capac Module capaci	,	30kVA~60kVA	30kVA ~ 120kVA 30kVA	30kVA~150kVA				
viodule capaci Vlax. number	ity	2	30KVA 4	5+1				
NPUT		<u>-</u>	Ť	0.1				
Nominal voltag	,		380/400/415Vac, (3Ph+N+PE)					
Operating volta		13	8 ~ 305Vac for 40% load; 305 ~ 485Vac for 100% lo	ad				
Operating freq Power factor	luency range	40Hz~70Hz ≥0.99						
Harmonic disto	ortion (THDi)		≤3% (100% linear load)					
	5111011 (111151)	M	ax. voltage: 220V: +25% (Optional +10%, +15%,	+20%)				
Dimono i inlton	o rongo	230V: +20% (Optional +10%, +15%)						
Bypass voltage	e range		240V: +15% (Optional +10%)					
		N	1in. voltage: -45% (Optional -10%, -15% -20%,	- 30%)				
Bypass freque	ency range		Frequency protection range: ± 10%					
Power walk in			Support					
Generator inpu OUTPUT	ut		Support					
Rated voltage			380/400/415Vac, (3Ph+N+PE)					
Power factor			1.0					
Voltage regula	ation		± 1%					
Output	Line mode	Synchronize with input, when the	input frequency $> \pm 10\%$ ( $\pm 1\%/\pm 2\%/\pm 4\%/\pm 5\%$	optional), output 50/60 (±0.1Hz)				
requency	Bat. mode		(50/60 ± 0.1%)Hz					
Crest factor	artian (TLIDy)		3:1 ≤1% with linear load; ≤3% with nonlinear load					
Harmonic disto Efficiencv	אלווטוו ( וחטע)		up to 95.8%					
BATTERY			ap to 30.070					
		± 180/192/204/216/228/240/2	252/264/276/288/300Vdc (30/32/34/36/38/40/42/44	/46/48/50pcs, 36pcs default,				
Battery voltage			factor 1.0, 32~34pcs output power factor 0.9, 30pcs					
Power module d			18A (Max.)					
SYSTEM FEA	ATURES		LIEBLATO Dellaro Como LIEBLATO					
Transfer time	In ortormodo	<1100/ com	Utility to Battery: 0ms; Utility to Bypass: 0ms in, ≤125% 10min, ≤150% 1min, > 150% 1.2s shut	down inverter				
Overload	Inverter mode Bypass mode		in, ≤ 125% Tomin, ≤ 150% Thin, > 150% 1.25 shut 5% for long term; 40℃: 125% for long term; >1000%					
Overheat	Буразотной		: Switch to Bypass; Backup Mode: Shut down UPS					
_ow battery vo	oltage	23 111000.	Alarm and Switch off	,				
Self-diagnosti			Upon Power On and Software Control					
Backfeed prote			Support					
EPO (Optional	1)	S	Shut down UPS immediately (Turn to bypass optional	1)				
Battery Noise sunnres	esion		Advanced Battery Management Complies with EN62040-3					
Noise suppression Audible & visual alarms		Compiles with Ein62040-3 Line Failure, Battery Low, Overload, System Fault						
Status LED &		Line Failure, Battery Low, Overload, System Fault Line Mode, Bypass Mode, Battery Low, Battery Fault, Overload & UPS Fault						
Reading on the		In	put, Output, Battery, Command, Setting, Maintenan	ce				
Communicatio		RS232, RS485, Parallel, LBS, Dry conta	oct port, Relay card (Optional), SNMP card (Optiona	), Battery temperature sensor (Optiona				
ENVIRONME			0% 40%					
Operating tem Storage tempe			0°C ~ 40°C -25°C ~ 55°C					
Storage tempe Humidity range			-25°C ~55°C 0 ~95% (Non condensing)					
aumidity range Altitude			< 1500m, derating required when > 1500m					
Noise level		<58dB	< 60dB	<62dB				
PHYSICAL								
Dimension	UPS cabinet	485×850×353mm (8U)	485 × 850 × 575mm (13U)	485 × 850 × 752mm (17U)				
	Power module		440×620×86mm (2U)					
W×D×H	UPS cabinet	69kg	79kg	98kg				

IEC/EN 62040-1, IEC/EN 62477-1 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)

STANDARDS

Safety EMC

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<sup>2.</sup> Data above are typical values for reference only, not as a basis for engineering design

## HPM3300E Subrack Modular Series

Module Mod	del	HPM3300	E-RM-40	HPM330	0E-RM-50				
Cabinet Mod	del <sup>I</sup>	HPM3300E-80	HPM3300E-120	HPM3300E-100	HPM3300E-150				
Cabinet capac	city	40kVA~80kVA	40kVA~120kVA	50kVA~100kVA	50kVA ~ 150kVA				
Module capacity			VA	50kVA~100kVA 50kVA					
лоаатс сарас Лах. number		2+1	3	2+1	3				
NPUT		2.1	ŏ	2.1	9				
NPUT Jominal volta	Ge.		380/400/415\/	ac, (3Ph+N+PE)					
Operating volt				: 305~485Vac for 100% load					
	quency range	40Hz ~ 70Hz							
Power factor	quority rurigo	≥0.99							
	ortion (THDi)	≤3% (100% linear load)							
idifficillo dict	ordon (mb)	≤3% (100% linear load)  Max. voltage: 220V: +25% (Optional +10%, +15%, +20%)							
				(Optional + 10%, + 15%)					
Bypass voltag	ge range			(Optional + 10%)					
				onal - 10%, - 15% - 20%, - 30%)					
Bypass freque	ency range			ction range: ±10%					
Power walk in				pport					
Generator inp				pport					
OUTPUT									
Rated voltage			380/400/415\/-	ac, (3Ph+N+PE)					
Power factor				1.0					
ower ractor oltage regula	ation			1%					
Dutput	Line mode	Synchronize with input, when the input frequency $> \pm 10\%$ ( $\pm 1\%/\pm 2\%/\pm 4\%/\pm 5\%$ optional), output 50/60 ( $\pm 0.1$ Hz)							
requency	Bat. mode	Syriorii Oriize Witi i II Iput			, oapat 00/00 (±0.1112)				
Crest factor	Dat. Hode	(50/60 ± 0.1%)Hz 3:1							
	ortion (THDv)	≤1% with linear load; ≤3% with nonlinear load							
Efficiency	ortion (Triby)	up to 96%							
BATTERY				5 5 5 7 5					
		± 180/192/204/216/228/240/252/264/276/288/300Vdc (30/32/34/36/38/40/42/44/46/48/50pcs, 36pcs default.							
Battery voltag	e	36-50pcs output power factor 1.0, 32-34pcs output power factor 0.9, 30pcs output power factor 0.8)							
Power module charge current		00 00p00 0at		.(Max.)	lower ractor (0.0)				
SYSTEM FE			207	((Viave)					
Fransfer time			Litility to Battery: Ome	; Utility to Bypass: 0ms					
	Inverter mode	≤1		% 1min, > 150% 1.2s shut down inv	verter				
Overload	Bypass mode	30℃: 135% for long term; 40℃: 125% for long term; >1000%, 100ms							
Overheat	2) pass 111000	Line Mode: Switch to Bypass; Backup Mode: Shut down UPS immediately							
ow battery vo	oltage	Alarm and Switch off							
Self-diagnosti		Upon Power On and Software Control							
Backfeed prot		Support							
EPO (Optiona		Shut down UPS immediately (Turn to bypass optional)							
Batterv				erv Management					
Voise suppres	ssion			th EN62040-3					
Audible & visu		Line Failure, Battery Low, Overload, System Fault							
Status LED &		Lin		w, Battery Fault, Overload & UPS F	ault				
	ne LCD display	LII		nmand, Setting, Maintenance					
Communication		RS232, RS485, Parallel, LBS, Dry contact port, Relay card (Optional), SMMP card (Optional), Battery temperature sensor (Optional)							
ENVIRONME		,,,	, , ,	, (,, 5000)					
Operating tem		0°C ~40°C							
Storage temp		-25°C ~ 55°C							
Humidity range		0~95% (Non condensing)							
Altitude				equired when > 1500m					
Voise level		< 56dB	< 58dB	<60dB	<62dB				
PHYSICAL									
Dimension	UPS cabinet		40E V 0E0 V	620mm (14LI)					
V×D×H				620mm (14U)					
,	Power module			130mm (3U)	401				
Vet weight	UPS cabinet	103k			13kg				
	Power module	32k	g	3	34kg				
STANDARDS	5								
afety				1, IEC/EN 62477-1					
MC		EC/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 61000-4-1							

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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
- $\cdot$  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
- $\cdot$  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

Module Mod	del		HPM3300E-RM-10						
Cabinet Mo	del	HPM3300E-30		HPM3300E-50					
Cabinet capac	city	30kVA		50kVA					
/lodule capac	,		10kVA						
1ax. number		3		5					
Module Mod	del		HPM3300E-RM-15						
abinet Mo	del	HPM3300E-45		HPM3300E-75					
abinet capad	citv	45kVA		75kVA					
lodule capac			15kVA	75.00					
1ax. number		3		5					
odule Mod	del		HPM3300E-RM-20						
Cabinet Mo	dol I	HPM3300E-60		HPM3300E-100					
abinet capad Iodule capad		60kVA	2017/7	100kVA					
lodule capac lax. number	лту	3	20kVA	5					
Module Mod	tel I	Ü	HPM3300E-RM-25	<u> </u>					
	-		I I	115140005 405					
Cabinet Mo		HPM3300E-50		HPM3300E-125					
abinet capad		50kVA		125kVA					
1odule capac	city	0.4 (D1	25kVA	-					
lax. number	1-1	2+1 (Redundancy)	LIDA40000E 511 00	5					
Module Mod	-		HPM3300E-RM-30						
Cabinet Mo		HPM3300E-60		HPM3300E-150					
abinet capad		60kVA		150kVA					
1odule capac	city		30kVA						
1ax. number		2+1 (Redundancy)		5					
NPUT Iominal volta	go.		290/400/445/20 (205 141 05)						
	~	400 005	380/400/415Vac, (3Ph+N+PE)						
Operating volt	tage range guency range	138~305	Vac for 40% load; 305 ~ 485 Vac fo 40Hz ~ 70Hz	1 100% 1080					
peraling fred ower factor	quericy rarige		40HZ~70HZ ≥0.99						
	ortion (THDi)								
iai i i ioi iio aist	ortion (Tribi)	≤3% (100% linear load) May voltage: 220½ + 25½ (Optional + 10½ + 15½ + 20½)							
		Max. voltage: 220V: +25% (Optional +10%, +15%, +20%) 230V: +20% (Optional +10%, +15%)							
Bypass voltag	ge range		240V: +15% (Optional +10%						
		Min. voltage: - 45% (Optional - 10%, - 15% - 20%, - 30%)							
Sypass freque	ency range		Frequency protection range: ± 10						
ower walk in									
Senerator inp	ut		Support						
DUTPUT									
Rated voltage			380/400/415Vac, (3Ph+N+PE)						
Power factor			1.0						
/oltage regula		0	±1%	40// 1 50/ - 15 10 - 15- 150/00 / 10 411-)					
Output requency	Line mode	Synchronize with input, when the input tr	(50/60 ± 0.1%)Hz	4%/±5% optional), output 50/60 (±0.1Hz)					
Crest factor	Bat. mode		3:1						
	ortion (THDv)	≤1%	% with linear load: ≤3% with nonline	ear load					
Efficiency	ortion (TribV)		up to 95.8%	ar load					
BATTERY			ар то осноло						
Battery voltag	P			/40/42/44/46/48/50pcs, 36pcs default,					
		36~50pcs output power factor 1	.0, 32~34pcs output power factor 0	0.9, 30pcs output power factor 0.8)					
ower module of SYSTEM FE	charge current		18A (Max.)						
ransfer time	ATURES	1.11:11	ity to Battery: 0ms; Utility to Bypass	s: Oms					
	Inverter mode		15% 10min, ≤150% 1min, >150%						
Overload	Bypass mode		long term; 40°C: 125% for long term						
Overheat			n to Bypass; Backup Mode: Shut do						
ow battery v			Alarm and Switch off	•					
Self-diagnost			Upon Power On and Software Con	trol					
Backfeed prof			Support						
PO (Optiona	al)	Shut dov	wn UPS immediately (Turn to bypa						
Battery			Advanced Battery Management						
Voise suppres			Complies with EN62040-3	-					
Audible & visu			ailure, Battery Low, Overload, Syst						
Status LED & LCD display Reading on the LCD display			Mode, Battery Low, Battery Fault, tput, Battery, Command, Setting, N						
Communicatio				/laintenance (Optional), Battery temperature sensor (Optional)					
NVIRONME		NOZOZ, NO400, Faraner, EDS, Dry Contact port,	Tody Card (Optional), Sivivir Card	(Optional), Dattery temperature sensor (Optional)					
perating ten			0℃~40℃						
Storage temp			-25°C ~ 55°C						
lumidity rang			0~95% (Non condensing)						
Altitude		<	1500m, derating required when > 1	500m					
Voise level		<58dB	.,	<61dB					
PHYSICAL									
imension	UPS cabinet		600 × 850 × 1200mm						
	Power module	4001	440×620×86mm (2U)	4.4Flm 4.70lm					
V×D×H	UPS cabinet	130kg~145kg	401) (4, 401, 45, 001) (4, 6)	145kg~170kg					
	D								
V×D×H let weight	Power module		10kVA: 19kg; 15~30kVA: 21kg						
			10kVA: 19kg; 15~30kVA: 21kg						

Specifications are subject to change without prior notice
 Data above are typical values for reference only, not as a basis for engineering design

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

Module Mode	el	HPM3300E-RM-40	HPM3300E-RM-50						
Cabinet Mod	el	HPM3300E-200/320	HPM3300E-200/300/400/500/600/800/1000						
abinet capaci	tv	200kVA	200kVA~1000kVA						
lodule capacit	,	40kVA	50kVA						
Max. number		5/8	4/6/8/10/12/16/20						
NPUT		0/0	47070710712710720						
ominal voltag	۵	380/400/415\/a	ac, (3Ph+N+PE)						
perating voltag			305 ~ 485 Vac for 100% load						
perating frequence			~70Hz						
ower factor	dericy range		).99						
armonic disto	rtion (TUDi)		6 linear load)						
arrioriic disto	rtiorr (Tribi)		(Optional +10%, +15%, +20%)						
			(Optional + 10%, + 15%)						
ypass voltage	e range		(Optional + 10%)						
			onal - 10%, - 15%, - 20%, - 30%)						
			tion range: ±10%						
ypass frequer	ncy range		~						
ower walk in			pport						
enerator inpu	IT	Sup	pport						
UTPUT		0001100111	(001, 11, 05)						
ated voltage			ac, (3Ph+N+PE)						
ower factor			.0						
oltage regulat			1%						
utput	Line mode		o ( ±1%/±2%/±4%/±5% optional), output 50/60 (±0.1Hz)						
equency	Bat. mode		0.1%)Hz						
rest factor			:1						
armonic disto	rtion (THDv)	≤1% with linear load; ≤3% with nonlinear load							
fficiency		up to 96%							
ATTERY									
attery 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)							
ower module ch	name current	20A (Max.)							
SYSTEM FEA		2011	(MCOU)						
ransfer time	TORLO	Utility to Battery: 0ms	; Utility to Bypass: 0ms						
	Inverter mode		% 1min, > 150% 1.2s shut down inverter						
verload	Bypass mode	30°C: 135% for long term: 40°C: 12	25% for long term; >1000%, 100ms						
verheat			up Mode: Shut down UPS immediately						
ow battery vo	Itage		Switch off						
elf-diagnostic		Unon Power On a	nd Software Control						
ackfeed prote			pport						
PO (Optional)			ely (Turn to bypass optional)						
attery	,		ery Management						
oise suppres:	sion	Complies with ENEQUAD-3							
udible & visua		Line Failure, Battery Low, Overload, System Fault							
tatus LED & I			w, Battery Fault, Overload & UPS Fault						
Reading on the			w, Battery Fault, Overload & OFS Fault Imand. Setting. Maintenance						
communication		1 / 1 / //	imand, Setting, Maintenance mal), SNMP card (Optional), Battery temperature sensor (Optional)						
NVIRONME		110202, 110400, Farallel, LDO, Dry Corllact Port, Relay Card (Optio	may, order Cara (Optional), battery temperature serisor (Optional)						
perating temp		0%	~40°C						
torage tempe			~40 C :~55℃						
umidity range			n condensing)						
urnany range Ititude		*	equired when > 1500m						
lilituae loise level		< 68dB	quired when > 1500m <73dB						
HYSICAL		\00UD	\ / JUD						
ITTOICAL			000/000/4001/4 000 050 0000						
	UPS cabinet		200/300/400kVA: 600 × 850 × 2000mm						
imension	(S/F)	200/320kVA: 600 × 850 × 2000mm	500/600kVA: 1200 × 850 × 2000mm						
/×D×H			800/1000kVA: 2000 × 850 × 2000mm						
	Power module	440×620	)×130mm						
	1100 - 11		200kVA: 240kg; 300kVA: 260kg; 400kVA: 290kg;						
	UPS cabinet	200kVA: 210kg; 320kVA: 270kg	500kVA: 480kg; 600kVA: 540kg; 800kVA: 960kg;						
et weight	(S/F)		1000kVA: 1050kg						
	Power module	33kg	34kg						
TANDARDS	. OTTO THOUGH	oong	OTIG						
afety		IEC/EN 62040-1. IEC/EN 62477-1							
MC									
1410		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

Mode: 3 phase input and 3 phase output

Power range: 200 ~ 1000kVA (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

#### 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
- $\cdot$  Support SNMP, RS232, RS485, Dry contact interface

## HPM3300E-T Series

Model		HPM3300E-200-T	HPM3300E-250-	T HPM3300E-300-	-T HPM3300E-400-1	T HPM3300E-500-	T HPM3300E-600-T	HPM3300E-800-T	HPM3300E-1000-
Capacity (VA)		200k	250k	300k	400k	500k	600k	800k	1000k
INPUT									
Nominal voltac	ae				380/400/415Va	ac. (3Ph+N+PE)			
Operating volta				138~30	05Vac for 40% load:	: 305 ~ 485 Vac for	100% load		
Operating freq					40Hz	~ 70Hz			
Power factor	, , ,	≥0.99							
Harmonic disto	ortion (THDi)				≤3% (100%	% linear load)			
	()			Max vo	oltage: 220V: +25%	,	+ 15% + 20%)		
_				1110711 110		6 (Optional + 10%			
Bypass voltage	e range					6 (Optional + 10%			
				Min. vo	oltage: - 45% (Optio				
Bypass freque	ency range				Frequency protec	ction range: ± 109	6		
Power walk in	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				. ,	pport			
Generator inpu	ut					pport			
OUTPUT	at								
Rated voltage					380/400/415\/	ac, (3Ph+N+PE)			
Power factor						1.0			
Voltage regula	ation					1%			
Output	Line mode	Sync	hronize with innu	t when the innut	frequency > ± 10%		1%/ + 5% ontional)	output 50/60 ( ± 0	1Hz)
frequency	Bat. mode	Oyrio	THOTHEC WILLTHIPO	it, Which the imput		: 0.1%)Hz	+ 707 = 0 70 Optional),	- Odipai 00/00 ( = 0	. 11 12)
Crest factor	Dat. Hode					3:1			
Harmonic disto	ortion (THDv)			≤1	% with linear load:	≤3% with nonline	ar load		
Efficiency	514011(11121)		≤1% with linear load; ≤3% with nonlinear load up to 96%						
BATTERY					ар к	3 00 70			
Battery voltage	Э	±			64/276/288/300Vdd				t,
Charaina curren	+	80A (Max.)			140A (Max.)				340Δ (May )
SYSTEM FEA		00/ ( ( ( ( Nax. )	100/	((VIGA.)	140/ ( (Max.)	100/ ((VIAX.)	200/1 (11/10/1.)	200/ (((((a)	040/ ((VIAX.)
Transfer time	TOTALO			U	Itility to Battery: 0ms	: Utility to Bypass	: Oms		
Overload	Inverter mode		€	110% 60min, ≤1	125% 10min, ≤150°	% 1min, > 150% <sup>-</sup>	1.2s shut down inve	erter	
Overload	Bypass mode			30°C: 135% fo	r long term; 40°C: 1	25% for long term	;>1000%, 100ms		
Overheat			Line Mode: Switch to Bypass; Backup Mode: Shut down UPS immediately						
Low battery vo	oltage				Alarm an	d Switch off			
Self-diagnosti	CS		Upon Power On and Software Control						
Backfeed prote	ection	Support							
EPO (Optional	I)		Shut down UPS immediately (Turn to bypass optional) Advanced Battery Management						
Battery									
Noise suppres	ssion		Complies with EN62040-3						
Audible & visu	al 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	e LCD display			Input, C	Output, Battery, Con	nmand, Setting, M	laintenance		
Communicatio	n interface	RS232, RS4	185, Parallel, LBS	6, Dry contact por	rt, Relay card (Optio	onal), SNMP card	(Optional), Battery	temperature sens	or (Optional)
<b>ENVIRONME</b>	NTAL								
Operating tem	perature	0°C ~ 40°C							
Storage temperature		−25°C ~ 55°C							
Humidity range	е				0~95% (No	n condensing)			
Altitude				<	< 1500m, derating re	equired when > 15	500m		
Noise level		< 65	5dB	<	68dB	< 7	0dB	< 73dB	<75dB
PHYSICAL									
Dimension W×D×H	S F		600 × 850	)×2000mm		1200 × 850	×2000mm	2000 × 850	)×2000mm
Net weight		360kg	400kg	480kg	530kg	800kg	890kg	1450kg	1600kg
STANDARDS	3								
Safety					IEC/EN 62040-1	I, IEC/EN 62477-	1		
EMC		IEC/EN 62040-	2 (IEC 61000-2-2	IEC 61000-4-2 IF				6. IEC 61000-4-8 IF	C 61000-4-11)
.1710		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
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