KSTAR

UPS Solution

YDC3300 Series
(10~200kVA)

Company Profile

Founded in 1993, Shenzhen KSTAR Science and Technology Co., Ltd. (Stock code: 002518) is a global leader in the smart energy field. Kstar focused on the R&D and manufacturing of UPS, Precision Cooling and MDC (Modular Data Center), Battery, PV, ESS and EV Charger.

Founded in: 1993 **30+ years**

Listed in: 2010 **Stock Code:002518**

Key Products

UPS | Cooling & MDC | Battery | PV | ESS | EV Charger

Listed
Listed on SZSE

2
R&D Centers

8
Facilities

180+
180+ Markets

670+
R&D Employees

4300+
4300+ Employees

Market Achievement

TOP 5

Global UPS Supplier

Data source: Omdia 2024

TOP 1

China UPS Selling Local Brands

Data source: CCID Consulting Annual Research Report on China's UPS Product Market in 2023-2024

TOP 1

China Single-rack Modular Data Center Market Share

Data source: ICT research Annual Report on China's Modular Data Center Product Market in 2023-2024

TOP 1

China Lead-acid Battery Market Share

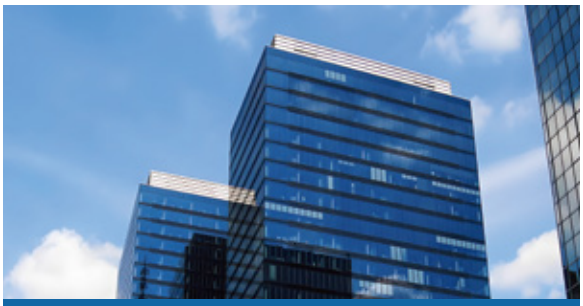
Data source: ICT research Report on China's UPS Supporting Lead-Acid Battery Product Market in 2023-2024

They Are Using Kstar

Beijing Olympic Games

Agricultural Bank of China Inner Mongolia Data Center

Shanghai Securities Waigaoqiao Earth Station



China's Leading Internet & E-commerce Giant A

Shanghai Telecom Data Center

Peking University Biomedical Imaging Technology Cluster Large Facility

Jinan Metro

Ruili to Menglian Expressway Electromechanical Project

Contents

YDC3300 Series

3:3 phase PF 0.9 (PF 1.0 optional)

Power range: 10~40kVA

Segment LCD

TFT colourful LCD

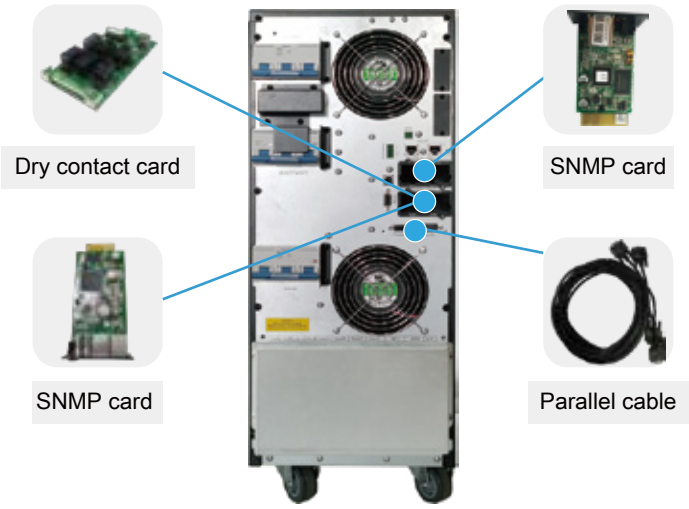
7 inch colourful LCD

Features

- High power density design
- N+X parallel redundancy,support maximum 4 units in parallel
- Online double conversion with DSP control
- Input current harmonic: <3%
- Wide input voltage range: 208~478Vac
- Wide input frequency range 40~70Hz
- Optimization battery group, the quantity of battery 10~30kVA: 16/18/20pcs (30~50pcs supportable)
  40kVA: 30~50pcs
- Maximum charging current up to 20A (Settable)
- Dual input source (Optional for standard unit)
- Colorful 2.4 inch TFT LCD display and 7 inch LCD display LCD are optional
- Versatile LCD human-computer interface
- Generator compatible
- ECO mode operation for energy saving
- Intelligent fan speed regulation
- Self-testing when UPS startup
- 50/60Hz frequency converter mode
- Cold start
- The output can meet 100% unbalanced load
- Multiple protection function: short-circuit, overload, overheat, battery overcharge and overdischarge, output low voltage and fan fault alarm
- Multiple communication interface: USB, RS232, RS485, Parallel port, Dry contact, Intelligent slot, SNMP card (Optional), Dry contact card (Optional), Battery temperature sensor (Optional)

Battery cabinet (Optional)

Optimized battery configuration 7Ah/9Ah (12V)



Technical Specifications

MODEL		YDC3310S	YDC3315S	YDC3320S	YDC3330S	YDC3340S
Capacity (VA/W)		10k/10k	15k/15k	20k/20k	30k/30k	40k/40k
INPUT						
Nominal Voltage (Vac)		380/400/415 (3Ph+N+PE)				
Operating Voltage Range (Vac)		305~478 (Full load); 208~478 (50% load)				
Power Factor		≥0.99				
Harmonic Distortion (THDi)		≤3% Linear load				
Bypass Voltage Range (Vac)		Max.voltage: 220: +25% (Optional +10%, +15%, +20%) 230: +20% (Optional +10%, +15%) 240: +15% (Optional +10%) Min.voltage: -45% (Optional -20%, -30%)				
Bypass Frequency Range (Hz)		50/60±10%				
OUTPUT						
Nominal Voltage (Vac)		380/400/415 (3Ph+N+PE)				
Voltage Regulation		±1%				
Output Frequency (Hz)		Line mode: ±1%/±2%/±4%/±5%/±10% of the rated frequency (Optional); Bat. mode: 50/60 (±0.1%)				
Crest Factor		3:1				
Harmonic Distortion (THDv)		≤2% Linear load; ≤5% Non linear load				
Overload	AC mode	≤110% 60min, ≤125% 10min, ≤150% 1min, >150% immediately turn to bypass				
	Bat.mode	≤110% 10min, ≤125% 1min, ≤150% 5s, >150% immediately shut down				
EFFICIENCY						
AC Mode		Up to 93.5%	Up to 94.5%		Up to 95.2%	
ECO Mode		Up to 98.0%	Up to 98.2%		Up to 98.6%	
BATTERY						
Battery Type		VRLA (Lead acid maintenance free battery)				
Battery Voltage (Vdc)		Chassis 1: ±120 (20pcs 9Ah)(20pcs 7Ah, 2×20pcs 7/9Ah, 3×20pcs 7/9Ah optional) Chassis 2: ±96Vdc (16pcs 9Ah)	±120 (2×20pcs 9Ah) (2×20pcs 7Ah, 3×20pcs 7/9Ah optional)		±120 (3×20pcs 9Ah)(3×20pcs 7Ah optional)	±180 (2×30pcs 9Ah)(2×30pcs 7Ah optional)
Charging Current (Max.)(A)		1.35 (2.7 Optional)	2.7		4.05	2.7
ENVIRONMENTAL						
Operating Temperature (℃)		0~40				
Storage Temperature (℃)		-25~55 (No battery)				
Humidity Range		0~95% (Non condensing)				
Altitude (m)		<1000, derating required when>1000				
Noise Level (dB)		<55		<58	<61	<64
PHYSICAL						
Dimension WxDxH (mm)		Chassis 1: 250×900×868 Chassis 2: 250×645×715	250×900×868			
Weight (kg)		Chassis 1: 129 (20pcs 9Ah) Chassis 2: 80 (16pcs 9Ah)	186 (2×20pcs 9Ah)	187 (2×20pcs 9Ah)	236 (3×20pcs 9Ah)	239 (2×30pcs 9Ah)
STANDARDS						
Safety		IEC/EN 62040-1, IEC/EN 62477-1				
EMC		IEC/EN 62040-2 (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, IEC 61000-2-2)				

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Technical Specifications

MODEL		YDC3310H	YDC3315H	YDC3320H	YDC3330H	YDC3340H
Capacity (VA/W)		10k/10k	15k/15k	20k/20k	30k/30k	40k/40k
INPUT						
Nominal Voltage (Vac)		380/400/415 (3Ph+N+PE)				
Operating Voltage Range (Vac)		305~478 (Full load); 208~478 (50% load)				
Power Factor		≥0.99				
Harmonic Distortion (THDi)		≤3% Linear load				
Bypass Voltage Range (Vac)		Max.voltage: 220: +25% (Optional +10%, +15%, +20%) 230: +20% (Optional +10%, +15%) 240: +15% (Optional +10%) Min.voltage: -45% (Optional -20%, -30%)				
Bypass Frequency Range (Hz)		50/60±10%				
OUTPUT						
Nominal Voltage (Vac)		380/400/415 (3Ph+N+PE)				
Voltage Regulation		±1%				
Output Frequency (Hz)		Line mode: ±1%/±2%/±4%/±5%/±10% of the rated frequency (Optional); Bat. mode: 50/60 (±0.1%)				
Crest Factor		3:1				
Harmonic Distortion (THDv)		≤2% Linear load; ≤5% Non linear load				
Overload	AC mode	≤110% 60min, ≤125% 10min, ≤150% 1min, >150% immediately turn to bypass				
	Bat.mode	≤110% 10min, ≤125% 1min, ≤150% 5s, >150% immediately shut down				
EFFICIENCY						
AC Mode		Up to 93.5%	Up to 94.5%		Up to 95.2%	
ECO Mode		Up to 98.0%	Up to 98.2%		Up to 98.6%	
BATTERY						
Battery Type		VRLA (Lead acid maintenance free battery)				
Battery Voltage (Vdc)		10~30kVA: ±96/108/120; battery quantity (16~20pcs, 16pcs default, 20pcs no power derating; 18pcs output power factor 0.8/0.9; 16pcs output power factor 0.7/0.8)				40kVA: ±180~300 (30~50pcs)
		±180~300 (30~50pcs)				
Charging Current (Max.)(A)		14	16	18	20	20
ENVIRONMENTAL						
Operating Temperature (℃)		0~40				
Storage Temperature (℃)		-25~55 (No battery)				
Humidity Range		0~95% (Non condensing)				
Altitude (m)		<1000, derating required when>1000				
Noise Level (dB)		<55		<58	<61	<64
PHYSICAL						
Dimension WxDxH (mm)		250×580×655				
Weight (kg)		35	39	40	43	46
STANDARDS						
Safety		IEC/EN 62040-1, IEC/EN 62477-1				
EMC		IEC/EN 62040-2 (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, IEC 61000-2-2)				

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BT 10-40kVA Battery Pack Specification

MODEL	MP31 BT40120N	YDC3320 BT80120N	YDC3330 BT80120N	YDC3340 BT60180N	YDC3340 BT80240N
BATTERY SYSTEM					
Battery Type	VRLA (Lead acid maintenance free battery)				
Typical Battery Recharge Time (hours)	6~8 (To 90% of full capacity)				
Typical Battery Life (years)	3~5, depend on discharing cycle and ambient temperature				
System Voltage (Vdc)	±120			±180	±240
Battery Quantity (pcs)	2×20	4×20		2×30	2×40
Capacity (Ah)	7/9				
PHYSICAL					
Dimension WxDxH(mm)	250×619×616 (With caster)	250×900×868 (With caster)			
Weight (kg)	122/134	244/265		200/215	244/265
ENVIRONMENTAL					
Operating Environment (℃)	0~40				
Humidity Range	0~95% (Non condensing)				
Altitude	<1000, derating required when >1000				
Noise Level (dB)	<40				
STANDARDS					
Safety	IEC/EN 62040-1, IEC/EN 62477-1				

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3. Remark: YDC3340 BT80240N "YDC3340" means series; "BT" means Battery Tower cabinet; "80" means battery number inside the cabinet; "240" means the battery system voltage; "N" means battery with neutral connection.

YDC3300 Series

3:3 phase PF 0.9 (PF 1.0 optional)

Power range: 50~80kVA

Features

- Wide input voltage range 138-485Vac (Phase voltage 80-280Vac), no derating when input voltage ≥305Vac
- High input power factor, it is up to 0.99
- 3-level inverter topology, the efficiency can be up to 95.5%
- Support parallel expanded operation: maximum is 6 units
- Support sharing batteries for the UPS in parallel
- Integrated solution, no additional battery cabinet is required, saving construction costs
- Maximum 6 groups of internal batteries, selectable according to autonomy time's requirement
- 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
- Power Walk in function, reduces the start current impact to system, and reduce the capacity of generator
- LBS function can realize 2 independent UPSs work in synchronization, and enhance the reliability of the system
- Support USB, RS485, RS232, SNMP and dry contact card

Technical Specifications

MODEL		YDC3350S	YDC3360S	YDC3380S
Capacity (VA/W)		50k/50k	60k/60k	80k/80k
INPUT				
Nominal Voltage (Vac)		380/400/415 (3Ph+N+PE)		
Operating Voltage Range (Vac)		138~305 for 40% load; 305~485 for 100% load		
Power Factor		≥0.99		
Harmonic Distortion (THDi)		≤3% Linear load		
Bypass Voltage Range (Vac)		Max.voltage: 220: +25% (Optional +10%, +15%, +20%) 230: +20% (Optional +10%, +15%) 240: +15% (Optional +10%) Min.voltage: -45% (Optional -20%, -30%)		
Bypass Frequency Range (Hz)		50/60±10%		
OUTPUT				
Nominal Voltage (Vac)		380/400/415 (3Ph+N+PE)		
Voltage Regulation		±1%		
Output Frequency (Hz)		Line mode: Synchronize with input, when the input frequency >±10% (±1%/±2%/±4%/±5% optional), output 50/60 (±0.1); Bat. mode: (50/60±0.2%)		
Crest Factor		3:1		
Harmonic Distortion (THDv)		≤2% Linear load; ≤4% with non linear load		
Overload	Inverter mode	≤110% 60min, ≤125% 10min, ≤150% 1min, >150% immediately shut down inverter		
	Bypass mode	30℃: 135% for long term; 40℃: 125% for long term; >1000%, 100ms		
EFFICIENCY				
AC Mode		Up to 95.5%		
ECO Mode		Up to 99%		
BATTERY				
Battery Type		VRLA		
Battery Voltage (Vdc)		±240 (6×40pcs 9Ah/12V)		
Charge Current (Max.)		20		40
ENVIRONMENTAL				
Operating Temperature (℃)		0~40		
Storage Temperature (℃)		-25~55 (No battery)		
Humidity Range		0~95% (Non condensing)		
Altitude (m)		<1000, derating required when >1000		
Noise Level (dB)		<58	<60	<62
PHYSICAL				
Dimension WxDxH (mm)		600×1000×2000		
Weight (kg)		740	950	1000
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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YDC3300 Series

3:3 phase PF 0.9 (PF 1.0 optional)

Power range: 50~200kVA

Features

- Wide input voltage range 138-485Vac (Phase voltage 80-280Vac), no derating when input voltage ≥305Vac
- High input power factor, it is up to 0.99
- 3-level inverter topology, the efficiency can be up to 95.5%
- Support parallel expanded operation: maximum is 6 units
- Support sharing batteries for the UPS in parallel
- Power Walk in function, reduces the start current impact to system, and reduce the capacity of generator
- 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
- Compatible with VRLA or lithium battery
- LBS function can realize 2 independent UPSs work in synchronization, and enhance the reliability of the system
- Support USB, RS485, RS232, SNMP and dry contact card

Technical Specifications

MODEL		YDC3350H	YDC3360H	YDC3380H	YDC33100H	YDC33120H	YDC33150H	YDC33160H	YDC33180H	YDC33200H
Capacity (VA/W)		50k/50k	60k/60k	80k/80k	100k/100k	120k/120k	150k/150k	160k/160k	180k/180k	200k/200k
INPUT										
Nominal Voltage (Vac)		380/400/415 (3Ph+N+PE)								
Operating Voltage Range (Vac)		138~305 for 40% load; 305~485 for 100% load								
Power Factor		≥0.99								
Harmonic Distortion (THDi)		≤3% Linear load								
Bypass Voltage Range (Vac)		Max.voltage: 220: +25% (Optional +10%, +15%, +20%) 230: +20% (Optional +10%, +15%) 240: +15% (Optional +10%) Min.voltage: -45% (Optional -10%, -15%, -20%, -30%)								
Bypass Frequency Range (Hz)		50/60±10%								
OUTPUT										
Nominal Voltage (Vac)		380/400/415 (3Ph+N+PE)								
Voltage Regulation		±1%								
Output Frequency (Hz)		Line mode: Synchronize with input, when the input frequency >±10% (±1%/±2%/±4%/±5% optional), output 50/60 (±0.1); Bat. mode: (50/60±0.2%)								
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
	Bypass Mode	30℃: 135% for long term; 40℃: 125% for long term; >1000%, 100ms								
EFFICIENCY										
AC Mode		Up to 95.5%								
ECO Mode		Up to 99%								
BATTERY										
Battery Type		VRLA/Li-ion								
Battery Voltage (Vdc)		360~600								
Charging Current(Max.)(A)		20		40			60			
ENVIRONMENTAL										
Operating Temperature (℃)		0 ~ 40								
Storage Temperature (℃)		-25~55 (No battery)								
Humidity Range		0~95% (Non condensing)								
Altitude (m)		1000, derating required when >1000								
Noise Level (dB)		<55	<58	<60	<62		<63		<64	<66
PHYSICAL										
Dimension WxDxH (mm)		250×828×868		442×850×1200						
Weight (kg)		80	83	144	147	152	190	200	220	230
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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Our Solution

UPS Solution
Transformer-less
Memopower Series
1~40kVA

UPS Solution
Transformer-less
HPM3300E Series
30~1200kVA

UPS Solution
Robust Transformer-based
UPS Series
1~800kVA

Precision Cooling Series
5~300kW

Data Center Integrated
Solution
IDU/IDM/IDB/IOU Series

Lead-acid Battery Series
3.5~250Ah (12V)
200~3000Ah (2V)

UPS Solution
Line Interactive UPS Series
0.4~3kVA

UPS Solution
Transformer-less
YDC3300 Series
10~200kVA

UPS Solution
Transformer-less UL
Products Series
1~100kVA

KSTAR

Kstar

HEADQUARTERS
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FACTORIES ADDRESS
Add: Kstar Industrial Park, Guangming High-tech Zone, Shenzhen
Add: Kstar Industrial Park, Zhongkai High-tech Zone, Huizhou, Guangdong
Add: Kstar Industrial Park, Fuyuan Industrial Zone, Guanlan, Shenzhen
Add: CATL-KSTAR Science and Technology Co.,Ltd.
Add: Jiangxi Changxin Golden Sunshine Power Co., Ltd.
Add: Jiangsu Kstar Energy Technology Co., Ltd.
Add: KSTAR (Vietnam) Co., Ltd.

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