

KSTAR

UPS Solution

Line Interactive UPS Series
(400~3000VA)



KSTAR Overview

Founded in 1993 and listed on the Shenzhen Stock Exchange in 2010, KSTAR has specialized in the research, development, and manufacturing of **UPS, Precision Air Conditioner and Modular Data Center, Battery, PV Inverter, Energy Storage, and EV Charger** for over 30 years. It is a leading provider of comprehensive solutions in the smart energy sector.



—
1993

Founded in

—
2010

Listed in

—
4300+

Employees

—
2

R&D Centers

—
8

Manufacturing Bases

—
180+

Countries and Regions



Market Achievement



Global UPS Manufacturer



The Valve-regulated Sealed Lead-acid Battery
Products Ranked First in the Chinese Mainland
Market in 2024-2025



Five Automatic Production Lines
The Annual Production Capacity is 3 Million kVAh



Cumulative Sales Reached 55 Million Units
A Large-scale National Industry System
National Unified Selection

Source: Omdia's "UPS Hardware Annual Tracker 2025"
2024-2025 Annual Report on China's UPS Battery Market (ICT Research)

1	Micropower Series (400~3000VA)	05
2	DG Series (600~3000VA)	07
3	AIO Series (600~1000VA)	09
4	Microsine Series (1000~2000VA)	11
5	VP68 RT Series (1~3kVA)	13
6	VP68 Li RT Series (1~3kVA)	15



General Introduction

This UPS is specially designed for personal computer with multi-functions. Its light weight, compact design perfect fits to the limited working environment

The line of UPS is equipped with one boost and one buck AVR to stabilize input voltage range. It is also built-in with DC start function

This function enables the UPS to be started up without AC power supply. Although it's a small UPS, the main features of UPS are listed below

Features

- ◆ Line Interactive UPS with simulated sinewave output
- ◆ Excellent microprocessor control guarantees high reliability (Internal self-diagnostic technology)
- ◆ Boost and buck AVR for voltage stabilization (One boost and one buck control)
- ◆ Auto restart while AC is recovering
- ◆ Cold start function
- ◆ Off-mode charging
- ◆ Fast intelligent battery recharge function
- ◆ Offering LED and LCD panels for selections
- ◆ Optional Generator compatible
- ◆ Optional USB/RS232 communication port and RJ11/RJ45 protection



Two kinds of Color LCD Display

LED Display



Optional Socket



Rear Panel

- ① AC Input; ② Output Socket; ③ USB & RJ11 Communication
④ USB & RS232 Communication; ⑤ RJ45

Technical Specifications

MODEL	Micropower 400	Micropower 600	Micropower 800	Micropower 1000	Micropower 1200	Micropower 1500	Micropower 2000	Micropower 2400	Micropower 3000
Capacity (VA/W)	400/240	600/360	800/480	1000/600	1200/720	1500/900	2000/1200	2400/1440	3000/1800
INPUT									
Nominal Voltage (Vac)	110/120 or 220/230/240							220/230/240	
Operating Voltage Range (Vac)	81~145/162~290							162~290	
Operating Frequency Range (Hz)	60/50 (Auto sensing)								
OUTPUT									
AC Voltage Regulation (Batt. Mode)	±10%								
Frequency Range (Batt. Mode) (Hz)	60/50 ±1								
Transfer Time (ms)	Typical 2-6, 10 Max.								
Waveform (Batt. Mode)	Simulated Sinewave								
BATTERY									
Battery Voltage (Vdc)	12			24				48	
Battery Capacity (Ah)& Number (pcs)	4.5×1	7×1	9×1	7×2	7×2	9×2	9×2	7×4	9×4
Typical Recharge Time (hours)	4~6 recover to 90% capacity			6~8 recover to 90% capacity					
MANAGEMENT									
LED Display	AC Mode, Battery Mode, Overload, Fault								
LCD Display	AC Mode, Battery Mode, Load Level, Battery Level, Input Voltage, Output Voltage, Overload, Fault, and Battery Low								
Alarm	Battery mode, Battery low, overload, Battery replacement, Fault								
Communication Port	USB or RS232 (Supports Windows® 2000/2003/XP/Vista/2008, Windows® 7, Linux, Unix, and MAC)								
PROTECTION									
Full Protection	Short circuit, Overload , Overcharge and overdischarge protection								
ENVIRONMENTAL									
Humidity	0~90%RH @ 0~40°C (Non condensing)								
Noise Level (dB)	<45					<55			
PHYSICAL									
Dimension WxDxH (mm)	298×101×142			353×149×162		380×158×198		436×145×212	
Weight (kg)	3.8	4.3	4.9	7.8	8.4	10.1	10.5	20	23
STANDARDS									
Safety	IEC/EN 62040-1; IEC/EN 60950-1								
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								
Performance	IEC/EN 62040-3								

1. Specifications are subject to change without prior notice

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



General Introduction

This UPS is specially designed for personal computer with multi-functions. Its light weight, compact design perfect fits to the limited working environment

The line of UPS is equipped with two boost and one buck AVR to stabilize wide input voltage range. It is also built-in with DC start function

This function enables the UPS to be started up without AC power supply. Although it's a small UPS, The main features of UPS are listed below



Two kinds of Color LCD Display

LED Display

Features

- ◆ Line Interactive UPS with simulated sinewave output
- ◆ Excellent microprocessor control guarantees high reliability (Internal self-diagnostic technology)
- ◆ Boost and buck AVR for voltage stabilization (Wide input range with two boost and one buck control)
- ◆ Auto restart while AC is recovering
- ◆ Cold start function
- ◆ Off-mode charging
- ◆ Fast intelligent battery recharge function
- ◆ Generator compatible
- ◆ Offering LED and LCD panels for selections
- ◆ Optional USB/RS232 communication port and RJ11/RJ45 protection



Optional Socket



Rear Panel

- ① AC Input; ② Output Socket; ③ USB & RJ11 Communication
④ USB & RS232 Communication; ⑤ RJ45

Technical Specifications

MODEL	DG 600	DG 800	DG 1000	DG 1200	DG 1500	DG 2000	DG 2400	DG 3000
Capacity (VA/W)	600/360	800/480	1000/600	1200/720	1500/900	2000/1200	2400/1440	3000/1800
INPUT								
Nominal Voltage (Vac)	230							
Operating Voltage Range (Vac)	140~300							
Operating Frequency Range (Hz)	50/60 (Auto sensing)							
OUTPUT								
AC Voltage Regulation (Batt. Mode)	±10%							
Frequency Range (Batt. Mode) (Hz)	50/60 ±1							
Transfer Time (ms)	Typical 4-8, 13 Max.							
Waveform (Batt. Mode)	Simulated Sinewave							
BATTERY								
Battery Voltage (Vdc)	12		24				48	
Battery Capacity (Ah)& Number (pcs)	7×1	9×1	7×2	7×2	9×2	9×2	7×4	9×4
Typical Recharge Time (hours)	4~6 recover to 90% capacity		6~8 recover to 90% capacity					
MANAGEMENT								
LED Display	AC Mode, Battery Mode, Overload, Fault						N/A	
LCD Display	AC Mode, Battery Mode, Load Level, Battery Level, Input Voltage, Output Voltage, Overload, Fault, and Battery Low							
Alarm	Battery mode, Battery low, overload, Battery replacement, Fault							
Communication Port	USB or RS232(Supports Windows® 2000/2003/XP/Vista/2008, Windows® 7, Linux, Unix, and MAC)							
PROTECTION								
Full Protection	Short circuit, Overload , Overcharge and overdischarge protection							
ENVIRONMENTAL								
Humidity	0~90%RH @ 0~40°C (Non condensing)							
Noise Level (dB)	<45				<55			
PHYSICAL								
Dimension WxDxH (mm)	298×101×142		353×149×162		380×158×198		436×145×212	
Weight (kg)	4.3	4.9	7.8	8.4	10.1	10.5	20	23

1. Specifications are subject to change without prior notice

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



General Introduction

The AIO All-in-One UPS series, featured with smart microprocessor control design, AVR boost and buck, Smart USB communication interface and cold start function, is an idea solution for protecting household and small office systems. In addition, the UPS is built-in USB charger, which can charge your mobile, PAD, etc.



Two kinds of Color LCD Display

LED Display

Features

- ◆ Boost and Buck AVR corrects either under-voltage or over-voltage condition to minimize the usage of battery energy, hence to extend the life of battery
- ◆ Built-in USB charger supplies feasible access to recharge your mobile or PAD alone
- ◆ With ergonomic cable management design, all the access of the cable is from top only
- ◆ Cold Start Function
- ◆ Smart USB Interface for Power management supports real-time power and UPS status monitoring. Automatic shutdown, schedule and many other advance power management functions
- ◆ Auto-restart function enables the UPS may be automatically re-started when Utility recovers



Optional Socket



Rear Panel

① AC Input

② Output Socket

③ USB Communication

④ USB Charger

Technical Specifications

MODEL	AIO 600	AIO 800	AIO 1000
Capacity (VA/W)	600/360	800/480	1000/600
INPUT			
Nominal Voltage (Vac)	220/230/240		
Operating Voltage Range (Vac)	162~290		
Operating Frequency Range (Hz)	50/60 (1±10%) auto-sensing		
OUTPUT			
AC Voltage Regulation (Batt. Mode)	±10%		
Frequency Range (Batt. Mode) (Hz)	50/60 ±1		
Transfer Time (ms)	Typical 2-6, 10 Max.		
Waveform (Batt. Mode)	Simulated Sinewave		
BATTERY			
Battery Voltage (Vdc)	12		
Battery Capacity (Ah)& Number (pcs)	7×1	9×1	9×1
Typical Recharge Time (hours)	6~8 recover to 90% capacity		
MANAGEMENT			
LED Display	AC Mode, Battery Mode, Overload, Fault		
LCD Display	AC Mode, Battery Mode, Load Level, Battery Level, Input Voltage, Output Voltage, Overload, Fault, and Battery Low		
Alarm	Battery mode, Battery low, overload, Battery replacement, Fault		
Communication Port	USB or RS232(Supports Windows® 2000/2003/XP/Vista/2008, Windows® 7, Linux, Unix, and MAC)		
USB Charger Port	5Vdc/1A or 5Vdc/2A type A (For mobile or iPad charging)		
PROTECTION			
Full Protection	Short circuit, Overload , Overcharge and overdischarge protection		
ENVIRONMENTAL			
Humidity	0~90%RH @ 0~40°C (Non condensing)		
Noise Level (dB)	<45		
PHYSICAL			
Dimension WxDxH (mm)	293×202×93		309×202×93
Weight (kg)	3.6	4.9	6.4
STANDARDS			
Safety	IEC/EN 62040-1; IEC/EN 60950-1		
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		
Performance	IEC/EN 62040-3		

1. Specifications are subject to change without prior notice

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



General Introduction

Microsine Series are Line Interactive UPS, with pure sinewave output waveform in Batt. Mode, and they offers perfect power protection for sensitive equipment. All models provide comprehensive LCD display for users to monitor the power status. With powerful protection, it prevents your data loss from power failure, surge, and sags.



Two kinds of Color LCD Display

Features

- ◆ Line Interactive UPS with true sinewave output
- ◆ Excellent microprocessor control guarantees high reliability (Internal self-diagnostic technology)
- ◆ Boost and buck AVR for voltage stabilization (One boost and one buck control)
- ◆ Auto restart while AC is recovering
- ◆ Cold start function
- ◆ Off-mode charging
- ◆ Fast intelligent battery recharge function
- ◆ Optional Generator compatible
- ◆ Optional USB/RS232 communication port and RJ45 protection



Optional Socket



Rear Panel

- | | |
|-----------------------------|-----------------|
| ① AC Input | ② Output Socket |
| ③ USB & RS232 Communication | ④ RJ45 |

Technical Specifications

MODEL	Microsine 1000	Microsine 1500	Microsine 2000
Capacity (VA/W)	1000/700	1500/1050	2000/1400
INPUT			
Nominal Voltage (Vac)	220/230/240		
Operating Voltage Range (Vac)	162~290		
Operating Frequency Range (Hz)	50/60 (Auto sensing)		
OUTPUT			
AC Voltage Regulation (Batt. Mode)	±10%		
Frequency Range (Batt. Mode) (Hz)	50/60 ±1		
Transfer Time (ms)	Typical 2-6, 10 Max.		
Waveform (Batt. Mode)	Pure Sinewave		
BATTERY			
Battery Voltage (Vdc)	24		
Battery Capacity (Ah)& Number (pcs)	7×2	9×2	9×2
Typical Recharge Time (hours)	6~8 recover to 90% capacity		
MANAGEMENT			
LED Display			
LCD Display	AC Mode, Battery Mode, Load Level, Battery Level, Input Voltage, Output Voltage, Overload, Fault, and Battery Low		
Alarm	Battery mode, Battery low, overload, Battery replacement, Fault		
Communication Port	USB or RS232(Supports Windows® 2000/2003/XP/Vista/2008, Windows® 7, Linux, Unix, and MAC)		
USB Charger Port			
PROTECTION			
Full Protection	Short circuit, Overload, Overcharge and overdischarge protection		
ENVIRONMENTAL			
Humidity	0~90%RH @ 0~40°C (Non condensing)		
Noise Level (dB)	<45	<55	
PHYSICAL			
Dimension WxDxH (mm)	353×149×162	380×158×198	
Weight (kg)	8.6	11.5	12.3
STANDARDS			
Safety	IEC/EN 62040-1; IEC/EN 60950-1		
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		
Performance	IEC/EN 62040-3		

1. Specifications are subject to change without prior notice

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



2 kinds of LCD can be selected



Green LCD



Advanced Touch Screen

Features

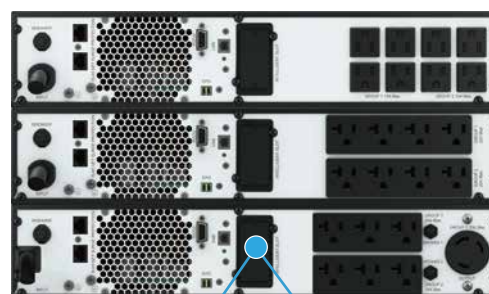
- ◆ Rack/Tower convertible design
- ◆ Wide input voltage range: 75~151Vac
- ◆ Selectable output voltage: 100/110/115/120/125Vac
- ◆ Smart charger design for optimized battery performance
- ◆ Emergency power off function (EPO)
- ◆ Generator compatible
- ◆ Hot-Swappable battery design
- ◆ Cold start
- ◆ Intelligent fan speed regulation
- ◆ Programmable receptacles optional
- ◆ Versatile LCD human-computer interface, 3.5 inch touch screen optional
- ◆ Multiple communication interface: RS232 (USB/EPO/Dry contact card/SNMP card optional)
- ◆ Multiple protection function: short-circuit, overload, over-heat, battery overcharge and over discharge, output low voltage and fan fault alarm
- ◆ Multiple groups of external battery boxes can be connected, providing diverse battery configuration options
- ◆ High operating efficiency, battery mode efficiency up to 92%, mains mode efficiency up to 98.5%
- ◆ Pass the safety certification standard UL1778
- ◆ The EMC meets FCC Part 15 Class B standards



Multifunctional Bracket



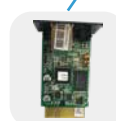
The LCD Panel can be rotated (Touch Screen is gravity sensing)



For 1&1.5k

For 2k

For 3k



SNMP Card



Dry Contact Card

Technical Specifications

MODEL	VP68 RT 1k	VP68 RT 1.5k	VP68 RT 2k	VP68 RT 3k
Capacity (VA/W)	1000/900	1500/1350	2000/1800	3000/2700
INPUT				
Nominal Voltage (Vac)	100/110/115/120/125			
Operating Voltage Range (Vac)	75~151			
Power Factor	≥0.99			
Bypass Frequency Range (Hz)	50~60			
OUTPUT				
Nominal Voltage (Vac)	100/110/115/120/125			
Voltage Regulation	±1%			
Power Factor	0.9			
Output Frequency(Hz)	50~60			
Crest Factor	3:1			
Harmonic Distortion (THDv)	≤2% Linear load; ≤5% Non-linear load			
Transfer Time (ms)	4~6 (10 max)			
Waveform	Sinewave			
EFFICIENCY				
AC Mode	Up to 98.5%	Up to 98.5%	Up to 98%	Up to 98%
Battery Mode	Up to 89.5%	Up to 91.0%	Up to 91.0%	Up to 92.0%
BATTERY				
Battery Type	Lead acid			
Battery Voltage (Vdc)	24	48	72	72
Battery Capacity (Ah)	7/9			
Charging Current (Max.)(A)	1.2/2.5			
MANAGEMENT				
LED/LCD Display	Line mode, Bat.mode, Battery low voltage, Overload & UPS fault			
ENVIRONMENTAL				
Operating Temperature (°C)	0~40			
Storage Temperature (°C)	-15~50			
Humidity Range	0~90%RH @ 0~40°C (Non condensing)			
Altitude (m)	<1000, derating required between 1000 to 3000			
Noise Level (dB)	<45			
PHYSICAL				
Dimension WxDxH (mm)	440×460×86.5	440×500×86.5	440×600×86.5	440×640×86.5
Weight (kg)	16.1	22.8	32.5	34.6
STANDARDS				
Safety	UL1778 5th Edition CSA C22.2 NO.107.3-14			
EMC	FCC Part 15, Subpart B, ClassB ANSI C63.4-2014			

1. Specifications are subject to change without prior notice

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



2 kinds of LCD can be selected



Green LCD



Advanced Touch Screen

Features

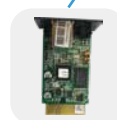
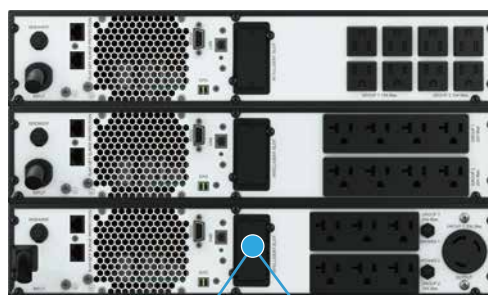
- Rack/Tower convertible design
- Built-in lithium battery with more than 2000 times cycle life
- Reliable BMS protection
- Wide input voltage range: 75~151Vac
- Selectable output voltage: 100/110/115/120/125Vac
- Smart charger design for optimized battery performance
- Emergency power off function (EPO)
- Generator compatible
- Hot-Swappable battery design
- Cold start
- Intelligent fan speed regulation
- Programmable receptacles optional
- Versatile LCD human-computer interface, 3.5 inch touch screen optional
- Multiple communication interface: RS232 (USB/EPO/Dry contact card/SNMP card optional)
- Multiple protection function: short-circuit, overload, overheat, battery overcharge and over discharge, output low voltage and fan fault alarm
- Internal batteries offer industry-leading runtime (Up to 9 minutes at full load) to protect critical equipment during an unexpected power loss
- Lithium-ion batteries can pack more power into smaller spaces
Recharge to 90% capacity in 3 hours or less
- Lithium-Ion technology delivers on average twice the life expectancy of traditional VRLA batteries
- Extend runtime when on battery power by power-cycling connected equipment and shedding less-critical loads
- High operating efficiency, battery mode efficiency up to 92%, mains mode efficiency up to 98.5%
- Pass the safety certification standard UL1778
- The EMC meets FCC Part 15 Class B standards
- UL 1642 (Cell)/UL1973 (Pack)/UN 38.3 (Transportation) certificate



Multifunctional Bracket



The LCD Panel can be rotated (Touch screen is gravity sensing)



SNMP Card



Dry Contact Card

Technical Specifications

MODEL	VP68 Li RT 1k	VP68 Li RT 1.5k	VP68 Li RT 2k	VP68 Li RT 3k
Capacity (VA/W)	1000/900	1500/1350	2000/1800	3000/2700
INPUT				
Nominal Voltage (Vac)	100/110/115/120/125			
Operating Voltage Range (Vac)	75~151			
Power Factor	≥0.99			
Bypass Frequency Range (Hz)	50~60			
OUTPUT				
Nominal Voltage (Vac)	100/110/115/120/125			
Voltage Regulation	±1%			
Power Factor	0.9			
Output Frequency (Hz)	50~60			
Crest Factor	3:1			
Harmonic Distortion (THDv)	≤2% Linear load; ≤5% Non-linear load			
Transfer Time (ms)	4~6 (10 max)			
Waveform	Sinewave			
EFFICIENCY				
AC Mode	Up to 98.5%	Up to 98.5%	Up to 98%	Up to 98%
Battery Mode	Up to 89.5%	Up to 91.0%	Up to 91.0%	Up to 92.0%
BATTERY				
Battery Type	LiFePO ₄			
Battery Voltage (Vdc)	25.6	48	76.8	76.8
Battery Capacity (Ah)	9	6	6	9
Charging Current (Max.) (A)	2.5			
MANAGEMENT				
LED/LCD Display	Line mode, Bat.mode, Battery low voltage, Overload & UPS fault			
ENVIRONMENTAL				
Operating Temperature (°C)	0~40			
Storage Temperature (°C)	-15~50			
Humidity Range	0~90%RH @ 0~40°C (Non condensing)			
Altitude (m)	<1000, derating required between 1000 to 3000			
Noise Level (dB)	<45		<50	
PHYSICAL				
Dimension WxDxH (mm)	440×460×86.5	440×460×86.5	440×600×86.5	440×640×86.5
Weight (kg)	13.6	15.3	22.5	27.9
STANDARDS				
Safety	UL1778 5th Edition CSA C22.2 NO.107.3-14			
EMC	FCC Part 15, Subpart B, ClassB ANSI C63.4-2014			

1. Specifications are subject to change without prior notice

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

Sustainability Commitment



Pollutant Discharge Permit
(2016)



Authoritative System
Certification



Product Certification



1.5 million kW/h
Annual output of photovoltaic
power generation system



4.76 kg/a.
Total lead emission reduction of
lead fume purification system

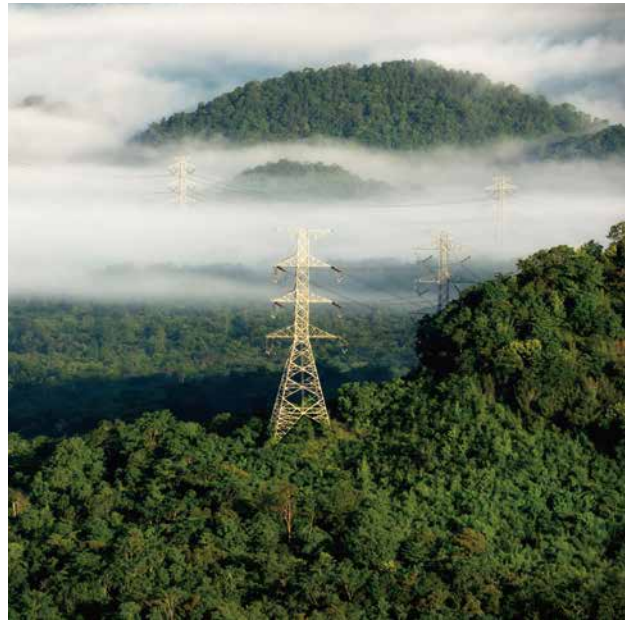


96.3%
Reuse rate of production water

Success Story



Beijing New Airport Eastern Airlines Base Project



State Grid Project



Core Data Center Project for a Major State-owned Bank's Headquarters



China Unicom Cloud Data Center Project

Success Story



JD Group Data Center UPS Project



Guangxi Medical University Second Affiliated Hospital Project



BYD Shenzhen&Shantou Plant 1 UPS Power Distribution Project



KL LRT/MRT Project, Malaysia

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



Battery Series



UPS Solution Line Interactive UPS Series

400~3000VA



UPS Solution Transformer-less YDC3300 Series

10~200kVA



UPS Solution Transformer-less UL Products Series

1~100kVA



KSTAR



Kstar



Website



Website: www.kstar.com



Tel: +86-755-86169858



Fax: +86-755-86168482



E-mail: sales@kstar.com

HEADQUARTERS

Add: 4 / F, No.1 Bldg. Software Park, Keji C. Rd. 2nd, Hi-Tech Industrial Zone, Shenzhen 518057, P.R.China

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 Gold Sunshine Power Co., Ltd.

Add: Jiangsu Kstar Energy Technology Co., Ltd.

Add: KSTAR (Vietnam) Co., Ltd.