KSTAR

UPS Solution

Line Interactive UPS Series
(400~3000VA)

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

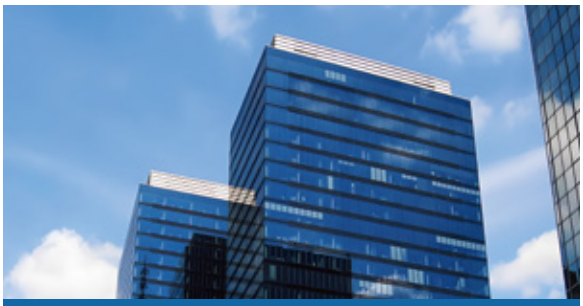
Data source: ICT research Report on China's UPS Supporting Lead-Acid Battery Product Market in 2023-2024

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

Micropower Series

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 stablilize 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 featuers of UPS are listed below

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

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

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	7x4	9x4
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℃ (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

DG Series

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℃ (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

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AIO Series

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℃ (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		

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Microsine Series

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

Optional Socket

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

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℃ (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		

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VP68 RT Series

2 Kinds of LCD Can be selected

Cost-effective
Green LCD

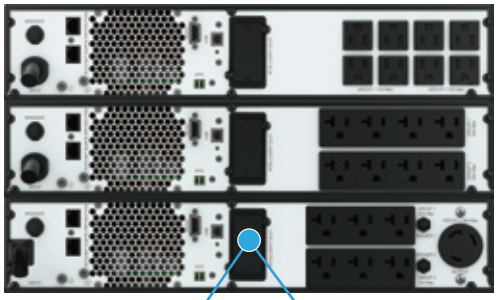
Advanced
Touch Screen

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 (℃)	0~40			
Storage Temperature (℃)	-15~50			
Humidity Range	0~90%RH @ 0~40℃ (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			

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VP68 Li RT Series

2 Kinds of LCD can be selected

Cost-effective
Green LCD

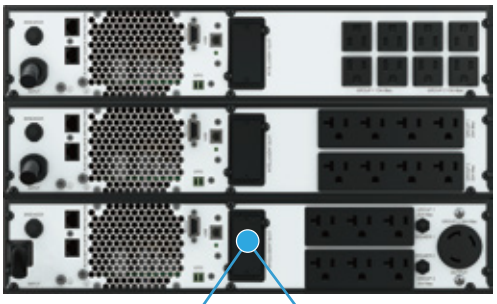
Advanced
Touch Screen

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 (℃)	0~40			
Storage Temperature (℃)	-15~50			
Humidity Range	0~90%RH @ 0~40℃ (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			

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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
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 Golden Sunshine Power Co., Ltd.
Add: Jiangsu Kstar Energy Technology Co., Ltd.
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