VOLTERA

POWER • RELIABILITY • FUTURE

UPS Solution

Line Interactive UPS Series (400~3000VA)



VOLTERA Overview

VOLTERA 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.** It is a leading provider of comprehensive solutions in the smart energy sector.

VOLTERA
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1993
Founded in

2
R&D Centers

2010
Listed in

8
Manufacturing Bases

4300+
Employees

180+
Countries and Regions

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Contents

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1	Micropower Series (400~3000VA)	04
2	AIO Series (600~1000VA)	06
3	Microsine Series (1000~2000VA)	08
4	VP68 RT Series (1~3kVA)	10
5	VP68 Li RT Series (1~3kVA)	12



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								

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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℃ (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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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 Outp ut 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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2 kinds of LCD can be selected



Green LCD



Advanced
Touch Screen

Features

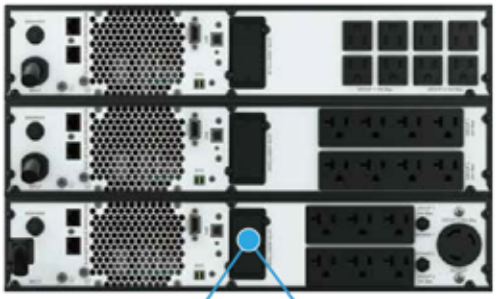
- Rack/Tower convertible design
- Wide input voltage range: 75~151Vac
- Selectable output voltage: 100/110/115/120/125Vac
- Smart charger design for optimized battery performance
- Emergency power off function (EPO)
- Generator compatible
- Hot-Swappable battery design
- Cold start
- Intelligent fan 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 (℃)	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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2 kinds of LCD can be selected



Green LCD



Advanced
Touch Screen

Features

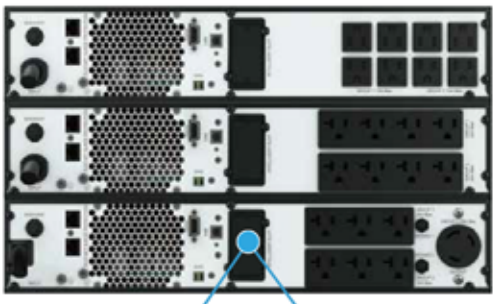
- Rack/Tower convertible design
- Built-in lithium battery with more than 2000 times cycle life
- Reliable BMS protection
- Wide input voltage range: 75~151Vac
- Selectable output voltage: 100/110/115/120/125Vac
- Smart charger design for optimized battery performance
- Emergency power off function (EPO)
- 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 (℃)	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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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

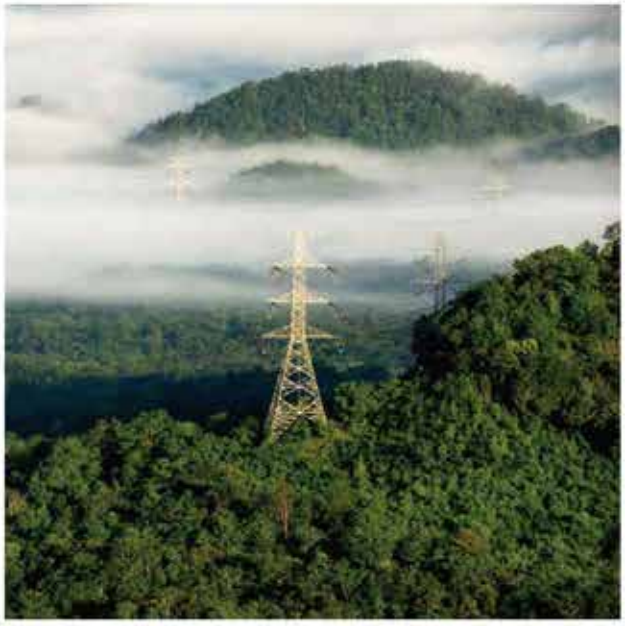
96.3%
Reuse rate of production water

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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



SCAN QR

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