

## Heteos 3000



### Heteos 100 Series, 3kVA

#### Applications:

- Server Room
- Office
- Commercial Buildings
- Telecom
- Healthcare

Heteos 100 Series UPS provides an innovative, well-engineered solution with our DSP technology guarantees high performance

Heteos 100 Series UPS provides the lowest total cost of ownership in its class by combining extremely compact footprint, tremendous flexibility and unprecedented ease of installation.

Heteos 100 Series UPS is ideal for applications where long backup time is needed and space is a constraint.

#### Minimizing Total Cost of Ownership (TCO)

Heteos 100 Series UPS is the clear choice if you're seeking to maximize your return on investment. Delivering the lowest TCO of any UPS in its class, Heteos 100 Series UPS offers the best solution for energy, space and installation savings.

#### Reliable Battery System

- Battery system is provided by a reliable brand in this particular battery segment 5-7-9Ah
- Easily Installation and lower costs
- 3-stage extendable charging design for optimized battery performance
- Maintenance bypass available

#### Easily installation

- The installation for Heteos 100 series is easier to minimize installation costs and improve reliability
- Our UPS components as standard to avoid additional installation cost

#### Outstanding Features

- Wide input-voltage range appropriate for the harshest electrical environment
- Standard Models for fixed-run time performance

#### Typical Electrical Characteristics

- High Output power factor
- Tested for generator compatibility

#### True reliability

- True Online Double conversion topology assures maximum reliability
- Active power factor correction provides  $\geq 0.99$  input power factor
- Optional isolation transformer offers full isolation and complete common mode noise rejection
- Factory system tested solution for enhanced reliability

#### Connectivity and Monitoring

- Supports Windows® 2000/2003/XP/Vista/2008, Windows® 7/8/10, Linux and MAC
- Power Management from SNMP manager and web browser
- Easily monitor, manage and remotely control UPSs across the network.

## 3kVA UPS Technical Specifications

MODEL		HETEOS 3000
Phase	1-phase in/1-phase out	
Capacity	3000VA/2700W	
<b>INPUT</b>		
Input Voltage	100/110/115/120/127 Vac or 200/208/220/230/240 Vac	
Input Voltage Range	55-150 Vac $\pm$ 5% or 110-300 Vac $\pm$ 5% @ 50% load 80-150 Vac $\pm$ 5% or 160-300 Vac $\pm$ 5% @ 100% load	
Frequency Range	40~70 Hz	
Power Factor	$\geq$ 0.99	
<b>MAIN COMPONENTS</b>		
Rectifier/Charger	to convert the 1-phase utility voltage into a controlled and regulated DC voltage, in order to supply power to the inverter, and to simultaneously charge the battery	
Inverter	conversion of DC to sinusoidal AC by power transistors of the IGB (Insulated Gate Bipolar Transistor) type	
Electronic Bypass Switch	provide an uninterruptible transfer of the load to the utility	
Main Control	By micro processor	
Control Panel	including LCD, command keys, status LEDs	
Interface	RS232, output signals, input signals, RPA (option), SNMP (option), Modbus RTU (option).	
<b>OPERATING MODES</b>		
On-Line Mode	The mains input is rectified/converted by the AC/DC section and then inverted to stable output by AC/DC section. In line-mode, the output is well-regulated and good to the loads	
On Battery	The battery power goes through the DC/DC section to the inverter (DC/AC) and output a stable backup power when the mains are failed. If the mains are recovered, the UPS will transfer to line mode without interruption.	
ECO Mode	Energy saving mode: When the input voltage is within voltage regulation range, UPS will bypass voltage to output for energy saving. The UPS will also charge the battery at ECO mode.	
Bypass Mode	When input voltage is within acceptable range but UPS is overload, UPS will enter bypass mode or bypass mode can be set by front panel. Alarm is sounding every 10 seconds.	
<b>OUTPUT</b>		
Output Voltage	100/110/115/120/127 Vac or 200/208/220/230/240 Vac	
AC Voltage Regulation	$\pm$ 1%	
Frequency Range (Synchronized Range)	47~53Hz or 57~63Hz	
Frequency Range (Batt. Mode)	50/60 Hz $\pm$ 0.5%	
Current Crest Ratio	$>$ 3:1	
Harmonic Distortion (THD)	$\leq$ 2% THD (Linear Load) $\leq$ 4% THD (Non-linear Load)	
Transfer Time	AC mode to Battery mode	zero
	Inverter to Bypass	4 ms (Typical)
Waveform (Batt. Mode)	Pure Sine Wave	
<b>EFFICIENCY</b>		
AC Mode	91%	
Battery Mode	90%	
<b>BATTERY</b>		
Standard Model	Battery Type	12V/9Ah
	Numbers	6 pcs
	Typical Recharge Time	4 hours recover to 90% capacity
	Charging Current (max.)	1.5A
	Charging Voltage	82.1VDC $\pm$ 1%

	Battery Charing When Run On Generator	Automatically when main power goes enables; when main power comes back disables
	Battery Capacity Indicator	UPS indicates the battery level by 0-24%, 25-49%, 50-74%, and 75-100%.
Premium & reliable characteristics		CSB Internal Batteries 12V/9Ah (store energy, valve regulated lead-acid (VRLA) type) Long life, low self-discharge rate (low resistance so recharge is easy) and energy output is more remarkable
<b>INDICATORS &amp; CONTROL</b>		
Technology		Controlled by microprocessor
Control Panel		Load level, Battery level, AC Mode, Battery mode, Bypass mode, and Fault conditions Command keys UPS Status Control LEDs
<b>PHYSICAL</b>		
Standard Model	Dimension, D×W×H (mm)	318 x 190 x 421
	Net Weight (kgs)	27.4
<b>ENVIRONMENT</b>		
Operation Temperature		0-40°C
Operation Humidity		0-95% RH
Altitude		0 ~ 1500m at full load
Noise Level		≤ 50 dB @1meter
<b>MEASUREMENTS</b>		
Rectifier		Input voltage & frequency
Battery		Voltage, temperature, charge level
Bypass		Input voltage & frequency
Inverter		Output voltage & frequency, synchronized status
Load		Voltage, current
<b>EVENTS, ALARMS</b>		
Manufacturing Standard		IEC 62040-1/2/3; IEC 60364, ISO9001 and equivalent
Events		can be loaded into PC, including date, time and details of events
LCD Display		UPS status control LEDs, command keys: Load level, Battery level, Input/Output voltage, Discharge timer, and Fault conditions
Alarms		signaled with the LED alarm and the buzzer, indicate abnormal functioning of the UPS
o Rectifier		Mains out of tolerance/ control logic failure
o Battery		Low/High Voltage, fault, insufficient power
o Inverter		Fuse failure/ contactor closing or opening failure/ voltage out of tolerance/ output power insufficient/ overload
o Bypass		Mains out of tolerance/ contactor closing or opening failure.
o Load		Overload/ load locked on inverter/ load locked on bypass
o General		Load off for overload/ battery low and over-temperature conditions/ inverter and mains not synchronized/ UPS overload
<b>MANAGEMENT</b>		
Management Software		UPS shall be used with ViewPower Management Software
Smart RS-232/USB		Supports Windows® 2000/2003/XP/Vista/2008, Windows® 7/8/10, Linux and MAC
Optional SNMP		Power management from SNMP, RPA, Modbus RTU, manager and web browser
Input signals		Emergency Power Off
Output signals		4 voltage-free contacts, settable from 27 signals
Interface		<u>Connectors</u> : RS-232 communication port; USB communication port; Emergency power off function connector (EPO connector); Share current port (only available for parallel model); Parallel port (only available for parallel model); SNMP Intelligent slot; External battery connector/terminal (Only available for long-run model); Line input circuit breaker/switch; Maintenance bypass switch (option); Input/Output terminal ; Line input terminal; Output terminal; Input grounding terminal; Output grounding terminal; Bypass input circuit breaker/switch; Bypass input terminal; Grounding terminal; Output switch; Dry contact communication port (optional)