




Huawei Energy Powering the Future
Huawei UPS Solutions

HUAWEI TECHNOLOGIES CO., LTD.





The rapid development of cloud technology is imposing ever stricter requirements on power supply – the very lifeblood for servers and switches. Ensuring reliable power supply, Huawei delivers reliable, efficient, convenient and intelligent UPS to cope with the disadvantages of efficiency, expansion, and availability hindrances, as well as high maintenance costs that traditional UPS brings. Huawei UPS provides customers with the best power supply solution to help customers deal with the problems encountered on overburdened power grids.

Huawei UPS Design Concept

Reliable

By using state of art design and craftsmanship, Huawei UPS provides customers the comprehensive reliability assurance measures from power input, energy storage to power output, which ensures the safe operation to the end user.

Convenient

Thanks to the hot-swap design of power modules and bypass module, the system can be expanded and maintained easily. Moreover, Huawei provides comprehensive and customized solutions that can abate customers' work greatly

Efficient

Combining optimized circuit topology, and high quality components, Huawei's full-range of UPSs offers you the high efficiency with low heat dissipation even in the low load condition, hence reducing the operating expenses effectively, while simultaneously ensuring uptime.

Intelligent

- All digital control based on DSP offers you reliability and flexibility
- Real-time monitoring on battery parameter and automatic temperature compensation
- NetEco smart network to cover all power supply nodes

Contents

UPS2000-A Series	01
UPS2000-G Series	03
UPS5000-E Series (25-125kVA)	05
UPS5000-E Series (40-320kVA)	07
UPS5000-E Series (40-800kVA)	09
UPS5000-A Series (30-120kVA)	11
UPS5000-A Series (200-800kVA)	13
Intelligent Management System	15
Optional Components	17



UPS2000-A Series
(1-3kVA)



UPS2000-G Series
(1-20kVA)



UPS5000-E Series
(25-800kVA)



UPS5000-A Series
(30-800kVA)

UPS2000-A Series

(1-3kVA)

Introduction

UPS2000-A series with a capacity ranging from 1kVA to 3kVA is an online double conversion power system that delivers continuous, high-quality AC Power. It's really a perfect power protection solution for small power scenarios.

Scenarios

- Small and medium enterprises, large enterprise branch offices, bank branches and other small data centers
- Networks, communications systems, automatic control systems and other precision equipment
- Family, office

Features

High Reliability

- Wide input voltage range to minimize battery use
- Online double conversion power system provides continuous, high-quality AC Power

Intelligent Management

- Variety of monitoring methods: supports SNMP / MODBUS / Dry contact / USB
- Supports function of delay shutdown: turning off the computer application systems and operating systems safely
- Multiple remote monitoring: supports SMS, E-mail, etc

High Availability

- LCD screen supports real-time monitoring and convenient operation
- Built-in battery, Easy to use
- Enables quick and easy configuration of the UPS



UPS2000-A-1K/2K/3K

Specifications

Rated capacity (kVA/kW)			1/0.8	2/1.6	3/2.4
Input: Output			1-in: 1-out		
Input					
Mains	Input wiring		Ph+N+PE		
	Rated voltage		200/208/220/230/240 VAC		
	Input voltage range		110-300 VAC		
	Input frequency range		40-70 Hz		
	Input power factor		0.99		
Bypass	Input rated voltage		200/208/220/230/240 VAC		
	Input voltage range		174-264 VAC		
	Input frequency range		47-53 Hz / 57-63Hz		
Battery	Battery voltage	Standard	24 VDC	48 VDC	72 VDC
		Long backup	36 VDC	72 VDC	96 VDC
	Backup time	Standard	> 5 minutes @ 80% load		
		Long backup	Depending on the capacity of external batteries		
Output					
Output wiring			Ph+N+PE		
Output connections			4 X IEC C13	6 X IEC C13	6 X IEC C13
Rated voltage			* 200/208/220/230/240 VAC ±1%		
Output frequency			47-53 Hz or 57-63 Hz (Synchronized Range); 50/60Hz±0.5% (Battery Mode)		
Output power factor			0.8		
Waveform			< 3%		
Efficiency			88%	89%	90%
Overload capacity			<110% overload for 10 min; <130% overload for 1 min; ≥130% overload for 3s		
Environment					
Operating temperature			0 to 40°C		
Storage temperature			−40 to +70°C (battery: −20 to +40°C)		
Humidity			0%–95% RH (no condensation)		
Altitude			0-1000m. Above 1,000 m, derating 1% for each additional 100 m		
Audible noise			<50dB @ 1 Meter		
Others					
Depth x Width x Height (mm)		Standard	282 x 145 x 220	397 x 145 x 220	421 x 190 x 318
		Long backup	282 x 145 x 220	397 x 145 x 220	397 x 145 x 220
Weight (kg)		Standard	9.2	16.8	27
		Long backup	4.1	6.7	7.4
Certifications			CE		
Communications			USB & RS232 (optional RS485/Dry contact/SNMP)		

* When the output voltage is set to 200/208, the capacity shall be derating to 80%

UPS2000-G Series

(1-20kVA)

Introduction

UPS2000-G series with a capacity ranging from 1kVA to 20kVA is an online double conversion power system that delivers continuous, high-quality AC power. It is rack/tower convertible and 95% high efficiency helps it get ECA energy saving certification from United Kingdom government and the world's first batch of "Energy Star" certification. It's really a perfect power protection solution for small power scenarios.

Scenarios

- Small and medium enterprises, large enterprise branch offices, bank branches and other small data centers
- Networks, communications systems, automatic control systems and other precision equipment

Features

High Reliability

- 5 kA lightning protection design, reducing lightning-related failure rate
- Key component failure pre-alarm including fans, batteries, bus capacitors to remind customers to maintain before failure occurs
- Wide input voltage range to minimize battery use: 280-176 Vac for 100% load; 176-80 Vac for 100%-40% load (derating linearly)

Reduced Power Loss

- High efficiency at online mode to reduce power loss of UPS and air conditioner: up to 95% for 15/20kVA, 94.5% for 10kVA, 94% for 6kVA

High Availability

- Rack/tower convertible, suitable for different installation scenarios
- High expandability design: up to four units can be connected in parallel to achieve higher capacity or reliability



UPS2000-G -1K/3K



UPS2000-G -6K/10K



UPS2000-G -15K/20K

Specifications

Rated Capacity (kVA/kW)		1 / 0.7		3 / 2.1		6 / 5.4*		10 / 9*		15 / 13.5		20 / 18	
Input : Output		1-in : 1-out						1-in : 1-out or 3-in : 1-out		1-in : 1-out, 3-in : 1-out or 3-in : 3-out			
Input													
Mains	Input Wiring	Ph+N+PE						Ph+N+PE /3Ph+N+PE					
	Rated Voltage	220/230/240 Vac						L-N: 220/230/240 Vac					
	Input Voltage Range	125-275 Vac				L-N: 80-280 Vac							
	Input Frequency Range	45-66 Hz				40-70 Hz							
	Input Power Factor	0.95				0.99							
Bypass	Rated Voltage	220/230/240 Vac				L-N: 220/230/240 Vac							
	Frequency	50/60±6 Hz											
Battery	Rated Voltage	36 Vdc		96 Vdc		192-240 Vdc				±(192-240) Vdc			
Output													
Output Wiring		Ph+N+PE										Ph+N+PE /3Ph+N+PE	
Output Sockets		3 × IEC C13 (10A)				2 × C13 (10A)		—					
Rated Voltage		220/230/240 Vac±2%				220/230/240 Vac±1%				L-N: 220/230/240 Vac			
Rated Frequency		Tracking the bypass input (Online Mode); 50/60±0.1 Hz (Battery Mode)											
Waveform		Sine wave, THDv<3%				Sine wave, THDv<2%							
Efficiency		88%		91%		94%		94.5%		95%			
Overload Capacity		130% overload for 60s 150% overload for 30s				125% overload for 5 min 150% overload for 1 min							
Environmental													
Operating Temperature		0-40℃											
Storage Temperature		-20-55℃				-40-70℃							
Relative Humidity		0%-95% (No condensing)											
Operating Altitude		1000 m. Above 1000 m, derating according to IEC62040-3											
Audible Noise		<45 dB				<55 dB				<58 dB			
Others													
Height×Width×Depth(mm)		86 × 440 × 500				86 × 430 × 585				130 × 430 × 685			
Weight		8.2 kg		11.2 kg		14 kg		16 kg		32 kg			
Certifications		EN/IEC 62040-1; EN/IEC 62040-2; EN/IEC 62040-3; CE; CB; RoHS, REACH, WEEE, etc											
Communications		RS232, dry contacts				RS485, USB, SNMP, dry contacts							

* 6kVA & 10kVA UPS have 2 versions: standard version and long backup time version

UPS5000-E Series

(25-125kVA)

Introduction

Based on the online double conversion technology, UPS5000-E series (25-125KVA) can provide reliable, pure and uninterrupted power for critical ICT equipments. The modularized architecture helps improve the availability and reduce the engineering cost significantly.

Scenarios

- Small & medium data center, large enterprise regional datacenter
- Central offices, dispatch center, control center, etc

Features

Modular Design

- Modularized design, expanding as required: all of power modules, bypass module and energy control module support hot swap

High Reliability

- Dual-controller design, eliminating the single point of failure
- 138-485 Vac wide input voltage range to minimize battery use

Improved Efficiency

- High efficiency of up to 95.5% helps reduce power consumption and operating expense

High Availability

- Better load adaptability: high output power factor up to 1 and no derating for capacitive or inductive devices with a PF>0.5
- Flexible battery configuration: 30-40 batteries per string allow customers to get the faulty battery out instead of replacing it

Ease of Networking and Management

- Provides RS485, SNMP, dry contact interface in standard configuration to make networking and management much easier



25kVA Power Module



UPS5000-E-125K-F125

Specifications

Model		UPS5000-E-125K-F125				
Rated Capacity (kVA/kW)		25 kVA/kW	50 kVA/kW	75 kVA/kW	100 kVA/kW	125 kVA/kW
Number of Power Modules		1	2	3	4	5
Input						
Mains	Input Wiring	3Ph+N+PE				
	Rated Voltage	380/400/415 Vac				
	Voltage Range	138-485 Vac				
	Input Frequency	40-70 Hz				
	Total Harmonic Distortion	THDi<3% for linear load, THDi<5% for nonlinear load				
	Input Power Factor	0.99				
Bypass	Input Wiring	3Ph+N+PE				
	Rated Voltage	380/400/415Vac				
	Input Frequency	50/60 ± 6Hz				
Battery	Rated Voltage	360-480 Vdc (The number of batteries can be selected from 30 to 40; 32 batteries in default)				
Output						
Output Wiring		3Ph+N+PE				
Voltage		380/400/415Vac ± 1%				
Frequency		Tracking the bypass input (Online mode); 50/60 Hz±0.1% (Battery mode)				
Waveform		Sine wave (THDv<1% for linear load; THDv<3% for non-linear load)				
Output Power Factor		1				
Overload Capacity		Inverter: 110% overload for 60 min; 125% overload for 10 min; 150% overload for 1 min Bypass: 135% overload for long term; >1000% overload for 100 ms				
Efficiency		95.5%				
Environmental						
Operating Temperature		0-40℃				
Storage Temperature		-40-70℃				
Relative Humidity		0%-95% (No condensing)				
Maximum Operating Altitude		1000 m. Above 1000 m, derating 1% for each additional 100 m				
Others						
Height×Width×Depth(mm)		2000 × 600 × 850				
Weight		227 kg	260 kg	293 kg	326 kg	359 kg
Certifications		EN/IEC 62040-1; EN/IEC 62040-2; EN/IEC 62040-3; CE; CB; RoHS, REACH, WEEE, etc.				
Communications		Dry contacts, RS485, SNMP				

UPS5000-E Series

(40-320kVA)

Introduction

UPS5000-E modular UPS with a capacity ranging from 40kVA to 320kVA is an online double conversion power system that offers stable and pure 380/400/415 Vac output. Benefiting from hot-swap design of key components that reducing mean time to repair greatly, the system reliability and availability is well improved. Moreover, UPS5000-E features wide input voltage range, high efficiency and power density , which can provide high efficient and reliable power protection to large power scenarios.

Scenarios

- Large and medium data centers, server rooms, security systems of finance, telecom and other large enterprises

Features

Modular Design

- Modularized design, expanding as required: all of power modules, bypass module and energy control module support hot swap

High Reliability

- Dual-controller design, eliminating the single point of failure
- Fault-tolerant design for fan system: 30% load can be driven when 2 fans fail and 50% load when 1 fan fails
- 138-485 Vac wide input voltage range to minimize battery use: 485-305 Vac for 100% load; 305-138 Vac for 100%-40% load (derating linearly)

Improved Efficiency

- High efficiency even at low load rate: 96% for 40% rated load; 95% for 20% rated load

High Availability

- High power density of up to 320kVA per cabinet, 50% footprint saving
- Better load adaptability: high output power factor up to 1 and no derating for capacitive or inductive devices with a PF>0.5
- Flexible battery configuration: 30-40 batteries per string allow customers to get the faulty battery out instead of replacing it



UPS5000-E-200K-F200



UPS5000-E-200K-F200

Specifications

Model		UPS5000-E-120K-F120	UPS5000-E-200K-F200	UPS5000-E-320K-F320
Rated Capacity (kVA/kW)		40-120	40-200	40-320
Number of Power Modules		1-3	1-5	1-8
Input				
Mains	Input Wiring	3Ph+N+PE		
	Rated Voltage	380/400/415Vac		
	Voltage Range	138-485 Vac (305-485 Vac for 100% load; 138-305 Vac for 40%-100% load)		
	Input Frequency	40-70 Hz		
	Total Harmonic Distortion	THDi<3% for linear load, THDi<5% for nonlinear load		
	Input Power Factor	0.99		
Bypass	Input Wiring	3Ph+N+PE		
	Rated Voltage	380/400/415 Vac		
	Input Frequency	50/60±6 Hz		
Battery	Rated Voltage	360-480 Vdc (The number of batteries can be selected from 30 to 40; 32 batteries in default)		
Output				
Output Wiring		3Ph+N+PE		
Voltage		380/400/415 Vac±1%		
Frequency		Tracking the bypass input (Online mode); 50/60 Hz±0.1% (Battery mode)		
Waveform		Sine wave (THDv<1% for linear load; THDv<3% for non-linear load)		
Output Power Factor		1		
Efficiency		96%		
Overload Capacity		Inverter: 110% overload for 60 min; 125% overload for 10 min; 150% overload for 1 min Bypass: 135% overload for long term; >1000% overload for 100 ms		
Environmental				
Operating Temperature		0-40℃		
Storage Temperature		-40-70℃		
Relative Humidity		0%-95% (No condensing)		
Maximum Operating Altitude		1000 m. Above 1000 m, derating 1% for each additional 100 m		
Audible Noise		<65 dB		<68 dB
Others				
Height×Width×Depth(mm)		2000 × 600 × 850		
Weight		227-293 kg	227-359 kg	253-480 kg
Certifications		EN/IEC 62040-1; EN/IEC 62040-2; EN/IEC 62040-3; CE; CB; RoHS, REACH, WEEE, etc.		
Communications		Dry contacts, RS485, SNMP		

UPS5000-E Series

(40-480/600/800kVA)

Introduction

UPS5000-E Series (40-800VA) is an advanced modular UPS based on Huawei's extensive experience in digital technology and power electronics. Benefiting from high performance DSP and high speed communication technology, the UPS5000-E system achieves leading expandability and availability. Its high efficiency, high availability match the requirements of cloud data center perfectly.

Scenarios

- Data centers in headquarter or disaster recovery data centers
- Internet data centers
- Large cloud computing data centers

Features

High Availability

- Centralized bypass design and high-speed communication technology boost expandability, which enables flexible capacity expansion as your business requires and avoids overinvestment
- All modular design: all of power modules, bypass module and energy control module support hot swap, which maximizes the availability and facilitates maintenance and fault clearance greatly
- Comprehensive communication and control unit redundancy improves system reliability

Low Power Consumption

- At online mode, a 96% system efficiency is achieved and UPS5000-E keeps high efficiency above 95% at the most common used load rate(20%-40% rated load), which reduces power consumption and operating expense greatly

Intelligent Battery Management

- Flexible battery configuration: 30-40 batteries per string allow customers to get the faulty battery out instead of replacing it
- Intelligent battery management and battery hibernation technology extend battery lifespan by 50%



UPS5000-E-480K-F480



UPS5000-E-800K-F800

Specifications

Model		UPS5000-E-480K-F480	UPS5000-E-600K-F600	UPS5000-E-800K-F800
Rated Capacity (kVA/kW)		40-480	40-600	40-800
Number of Power Modules		1-12	1-15	1-20
Input				
Mains	Input Wiring	3Ph+N+PE		
	Rated Voltage	380/400/415Vac		
	Voltage Range	138-485 Vac (305-485 Vac for 100% load; 138-305 Vac for 40%-100% load)		
	Frequency Range	40-70 Hz		
	Total Harmonic Distortion	THDi<3% for linear load, THDi<5% for nonlinear load		
	Input Power Factor	0.99		
Bypass	Rated Voltage	380/400/415 Vac		
	Input Frequency	50/60±6 Hz		
	Rated Voltage	360-480 Vdc (The number of batteries can be selected from 30 to 40; 32 batteries in default)		
Output				
Output Wiring		3Ph+N+PE		
Voltage		380/400/415 Vac±1%		
Frequency		Tracking the bypass input (Online mode); 50/60 Hz±0.1% (Battery mode)		
Waveform		Sine wave (THDv<1% for linear load; THDv<3% for non-linear load)		
Output Power Factor		1		
Efficiency		96%		
Overload Capacity		Inverter: 110% overload for 60 min; 125% overload for 10 min; 150% overload for 1 min Bypass: 135% overload for long term; >1000% overload for 100 ms		
Environmental				
Operating Temperature		0-40℃		
Storage Temperature		-40-70℃		
Relative Humidity		0%-95% (No condensing)		
Maximum Operating Altitude		1000 m. Above 1000 m, derating 1% for each additional 100 m		
Audible Noise		< 68dB	< 68dB	<70dB
Others				
Height×Width×Depth(mm)		2000×1200×850	2000×2000×850	2000×2400×850
Weight		693-1050	1045-1500	1185-1800
Certifications		EN/IEC 62040-1; EN/IEC 62040-2; EN/IEC 62040-3; CE; CB; RoHS, REACH, WEEE, etc.		
Communications		Dry contacts, RS485, SNMP		

UPS5000-A Series

(30-120kVA)

Introduction

The UPS5000-A (30-120kVA) is an online, double-conversion, and tower/rack convertible UPS that Huawei has launched. It uses the digital signal processing (DSP) technology to output pure and stable sine wave with a voltage of 380/400/415 Vac. With comprehensive reliability assurance measures and other leading technologies, the UPS5000-A (30-120kVA) can provide reliable, economical, intelligent, and convenient solutions to medium power scenarios.

Scenarios

- Small- and medium-sized data centers
- Telecom and Internet switch rooms
- Equipment rooms of branch offices in sectors such as finance
- Infrastructures, such as control equipment rooms, wireless systems, etc.

Features

High Reliability

- Wide input voltage range to minimize battery use: 485-305 Vac for 100% load; 305-138 Vac for 100%-40% load (derating linearly)

Low Power Consumption

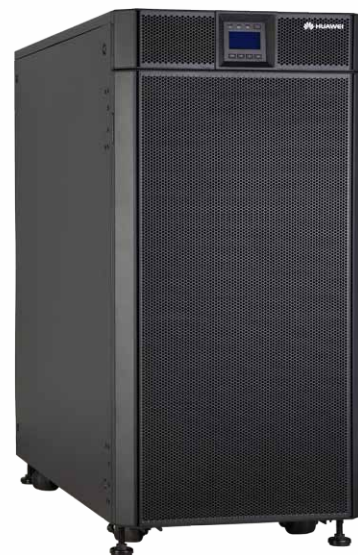
- High efficiency at online mode of up to 95.7%, reducing power consumption of UPS and cooling equipment effectively

High Availability

- Rack/tower convertible, suitable for different installation scenarios
- High output power factor of up to 1, 30% more load driven than traditional UPS
- Flexible battery configuration: 30-40 batteries per string allow customers to get the faulty battery out instead of replacing it



UPS5000-A-30/40K



UPS5000-A-60/80/120K

Specifications

Rated Capacity (kVA/kW)		30 / 30	40 / 40	60 / 60	80 / 80	120 / 120
Input						
Mains	Input Wiring	3Ph+N+PE				
	Rated Voltage	380/400/415 Vac				
	Voltage Range	138-485 Vac				
	Frequency Range	40-70 Hz				
	Total Harmonic Distortion	<3%				
	Input Power Factor	0.99				
Bypass	Input Wiring	3Ph+N+PE				
	Rated Voltage	380/400/415 Vac				
	Input Frequency	50/60±6 Hz				
Battery	Rated Voltage	360-480 Vdc (The number of batteries can be selected from 30 to 40; 32 batteries in default)				
Output						
Output Wiring		3Ph+N+PE				
Voltage		380/400/415 Vac±1%				
Frequency		Tracking the bypass input (Online mode); 50/60 Hz±0.1% (Battery mode)				
Output Power Factor		1				
Waveform		Sine wave (THDv<1% for 100% linear load)				
Efficiency		Up to 95.7%				
Overload Capacity		110% overload for 60 min; 125% overload for 10 min; 150% overload for 1 min				
Environmental						
Operating Temperature		0-40℃				
Storage Temperature		-40-70℃				
Relative Humidity		0%-95% (No condensing)				
Maximum Operating Altitude		1000 m. Above 1000 m, derating according to IEC62040-3				
Audible Noise		≤58 dB		≤64 dB		
Others						
Height×Width×Depth(mm)		500 × 264 × 800		1020 × 440 × 850		
Weight		70 kg		200 kg		240 kg
Certifications		EN/IEC 62040-1; EN/IEC 62040-2; EN/IEC 62040-3; CE; CB; RoHS, REACH, WEEE, etc.				
Communications		Dry contacts, RS485, SNMP				

UPS5000-A Series

(200-800kVA)

Introduction

Huawei UPS5000-A (200-800kVA) is an online double conversion UPS which can output pure sine wave with rated voltage of 380/400/415 Vac. UPS5000-A has a high efficiency of up to 96% and high power density of up to 300kVA per cabinet; all-digital control allows precise output at any input and load condition. It's suitable to ensure continuous power supply to critical loads in large datacenters.

Scenarios

- Large data centers, server rooms, security systems of finance, telecom and other large enterprises
- Data center of government or public institutions
- Precision instruments

Features

High Reliability

- Wide input voltage range to minimize battery use: 485-305 V for 100% load; 305-138 Vac for 100%-40% load (derating linearly)

Low Power Consumption

- High efficiency of up to 96%, reducing power consumption effectively

High Availability

- High power density of up to 300kVA per rack, 50% footprint saving compared with traditional UPS
- Better load adaptability: high output power factor up to 1 and no derating for capacitive or inductive devices with a PF>0.5
- Flexible battery configuration: 30-40 batteries per string allow customers to get the faulty battery out instead of replacing it



UPS5000-A-200/300K



UPS5000-A-400/500K

Specifications

Rated Capacity (kVA/kW)		200 / 200	300 / 300	400 / 380	500 / 475	600 / 570	800 / 760
Input							
Mains	Input Wiring	3Ph+N+PE					
	Rated Voltage	380/400/415 Vac					
	Voltage Range	138-485 Vac					
	Frequency Range	40-70 Hz					
	Total Harmonic Distortion	<3%					
	Input Power Factor	0.99					
Bypass	Input Wiring	3Ph+N+PE					
	Rated Voltage	380/400/415 Vac					
	Input Frequency	50/60±6 Hz					
Battery	Rated Voltage	360-480 Vdc (The number of batteries can be selected from 30 to 40; 32 batteries in default)					
Output							
Output Wiring		3Ph+N+PE					
Voltage		380/400/415 Vac±1%					
Frequency		Tracking the bypass input (Online mode); 50/60 Hz±0.1% (Battery mode)					
Output Power Factor		1		0.95			
Waveform		Sine wave (THDv<1% for 100% linear load)					
Efficiency		96%					
Environmental							
Operating Temperature		0-40°C					
Storage Temperature		-40-70°C					
Relative Humidity		0%-95% (No condensing)					
Maximum Operating Altitude		1000 m. Above 1000 m, derating according to IEC62040-3					
Audible Noise		< 65 dB	< 67 dB	< 68 dB			< 70 dB
Others							
Height×Width×Depth(mm)		2000 × 600 × 850		2000 × 1200 × 850		2000 × 2000 × 850	2000 × 2400 × 850
Weight		360 kg	550 kg	900 kg	1000 kg	1470 kg	1770 kg
Certifications		EN/IEC 62040-1; EN/IEC 62040-2; EN/IEC 62040-3; CE; CB; RoHS, REACH, WEEE, etc.					
Communications		Dry contacts, RS485, SNMP					

Intelligent Management System

NetEco 1000U for UPS System Management

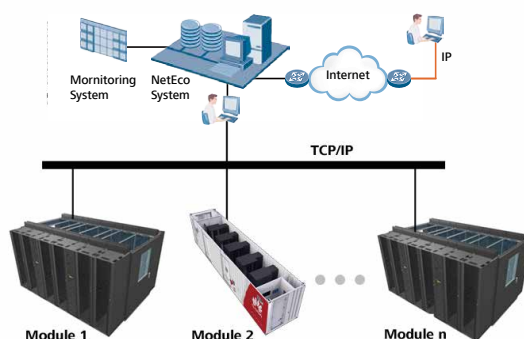
iManager NetEco 1000U can run on the Windows operating system and can be accessed through a web browser. The iManager NetEco 1000U enables you to monitor the key performance indicators (KPIs) and alarms of the UPSs in real time. In addition, it enables you to remotely control and manage the UPSs. This increases the centralized management and remote operation and maintenance capabilities for the UPSs. NetEco 1000U supports connection through USB Data lines, RS232 cable, or network cable.

NetEco 6000 for Data Center Management

Introduction

NetEco is a new generation data center management system launched by HUAWEI. It manages the real-time data and status of data center infrastructures, including power, environment, video, and door status and generates alarms if any fault occurs.

NetEco displays data center layouts and data reports for customers to easily query equipment status, and provides a standard platform to apply to all data center solutions due to its flexible configuration, smooth capacity expansion, and hierarchical management.



Value & Features

High availability, warning and troubleshooting

- Foresight warning of faults and risks improves IDC availability
- Quickly faults location, virtual inspection

Smart interaction, energy saving

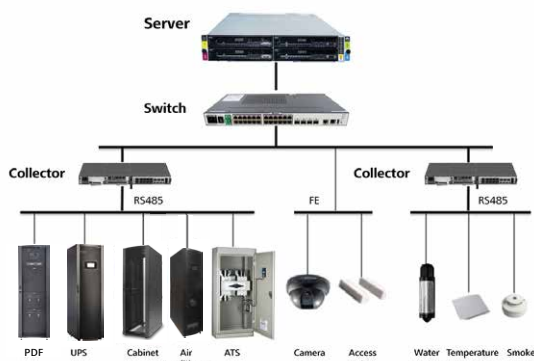
- Dynamic PUE management
- Optimizing important power and cooling services

Rapid deployment, one -button launching

- Pre-configured software and parameters, one-button launching
- Parameters of AC and UPS loading, testing time saving

Easy visualization maintenance in 3D view

- The 3D design tool realizes 3D visual maintenance
- Dynamic 3D display of site temperature, eliminating hot spots



Technical Specification

Monitoring Systems

Bottom-layer equipments can be easily connected to NetEco over Modbus, Simple Network Management Protocol (SNMP), and intelligent equipment communication protocol. Customers can customize NetEco for the support of non-standard protocols. Bottom-layer devices monitored by the NetEco are classified into the power system, environment system, video system, and access system.

Power System

Precision air conditioner,
UPS, PDU, UPS input cabinet,
UPS output cabinet, Precise
PDF, AC PDF

Environment System

Temperature and humidity
sensor, smoke sensor,
water sensor

Video System

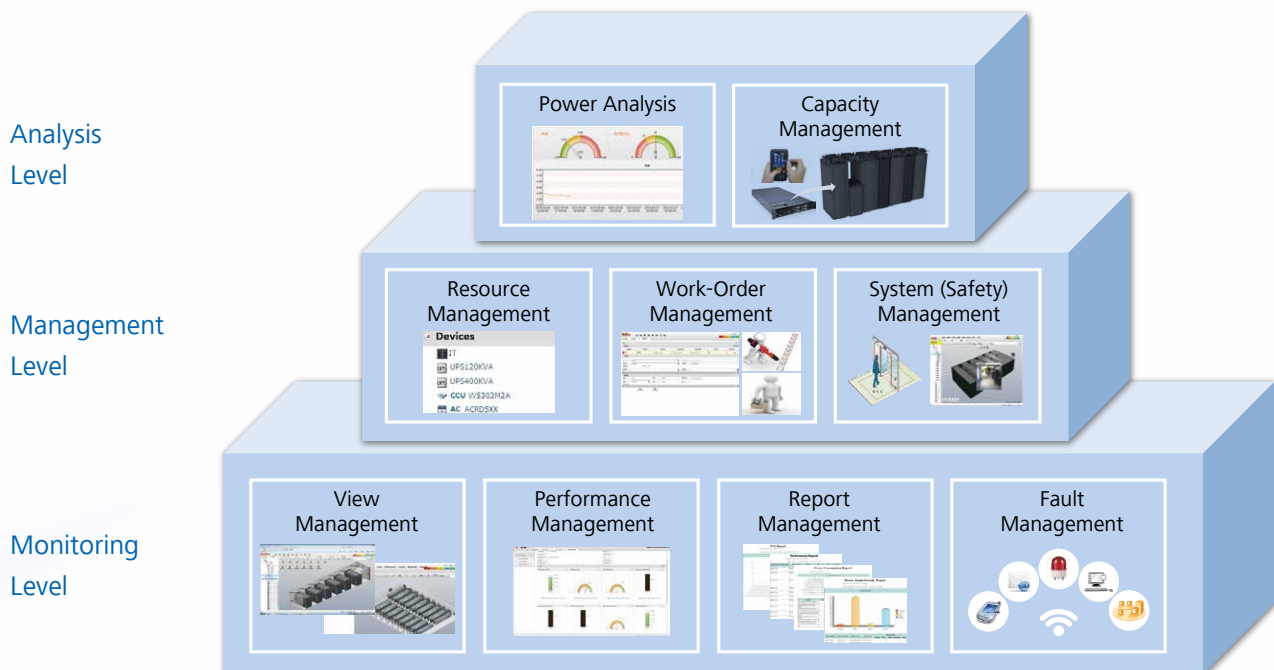
Camera, NVR (Optional)

Access System

Door access controller

Functions

NetEco provides comprehensive functions for managing data center infrastructures.



Optional Components

Communication cards for connectivity*

Item	Introduction
RMS-SNMP01A (For UPS2000-G)	RMS-SNMP01A supports protocols including SNMP, HTTP, HTTPS, and SSH. Moreover, RMS-SNMP01A implements IP address control over HTTPS, SNMPv3, and SNMP access to prevent unauthorized access.
RMS-MODBUS01A (For UPS2000-G)	The Modbus card provides a RS485 networking solution for remote UPS management.
RMS-RELAY01A (For UPS2000-G)	The dry contact card provides six alarm dry contact outputs and two dry contract control inputs.
Dry contact extended card (For UPS5000 series)	The dry contact extended card provides five relay dry contact outputs and five signal input ports. The card implements additional alarm and control functions to meet customer requirements

* UPS5000-E and UPS5000-A provide built-in SNMP, Modbus and dry contact interface



RMS-SNMP01A



RMS-MODBUS01A



RMS-RELAY01A



Dry contact extended card

Environmental sensors

Item	Introduction
Battery temperature sensor	Battery temperature sensor can detect the battery temperature and provide reference for temperature compensation when floatcharging
Ambient temperature and humidity sensor	Ambient temperature and humidity sensor can feedback real-time temperature and humidity data to dynamic environment monitoring system and help customers achieve lean management



BMU



Battery ground fault detector

Battery monitoring

Item	Introduction
Battery Monitoring Unit (BMU)	Each BMU monitors the voltages, charge and discharge currents, and temperatures of 24 batteries with a rated voltage of 2–12 V DC
Battery ground fault detector	The battery ground fault detector detects battery ground fault and sends alarm signals when the ground leakage current exceeds the threshold value

In addition, Huawei provides optional components including power distribution cabinets, battery switch boxes, and backfeed protection cards to meet various configuration requirements.

Comprehensive Reliability Assurance

Comprehensive reliability activities in the whole process ensure the reliable operation of millions of Huawei power systems in various severe conditions.



EMC Lab



Long life test (40°C, 100% load, 180 days)



Airborne hygroscopic dust test



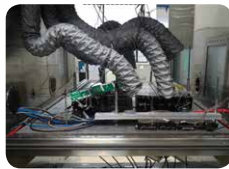
Aging test



Sampling test of thermal shock



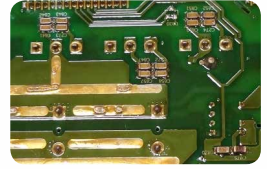
Environment Lab



highly accelerated life test



External field test
(High humidity and salt spray environment)



Enhanced conformal coating

Global Service

Huawei has professional UPS service engineers deployed globally, providing global technical support with rapid response speed. Huawei provides customized services that include:

- 24x7 remote support
- Software support
- Active prevention
- Hardware support
- Onsite support
- Others

140+ countries

129+ national spare parts centers

300+ regional warehousing centers

22,000+ servers

24x7 online service







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