

UPS5000-H

(400-1600kVA)

Introduction

UPS5000-H is Huawei's medium and large-scale uninterruptible power supply system with advanced 100kVA/3U hot swappable power modules. The system achieves 1 MW, 1 rack, effectively saves footprint and installation time. System efficiency is up to 97%. Intelligent iPower improves system reliability and simplifies operation and maintenance for customers. The S-ECO(Super ECO) mode achieves not only high efficiency and optimal power quality but also non-interruptible mode transferring.



Power Module: 100kVA/3U

Application Scenarios

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

Features

Simple

- Hot swappable power module, bypass module and control module simplify maintenance and expansion in 5 minutes
- Top bus way prefabricated design, reducing on-site installation time by 60%

Green

- 1 MW, 1 rack, saving the footprint by 50%
- Online mode: 97% system efficiency, high efficiency at light-load
- S-ECO mode: 99% system efficiency, saving 140,000\$ in lifetime
- S-ECO mode active filtering, optimal power quality

Smart

- iPower pre-warnings for key components by AI method
- Source share of main and battery achieves intelligent peak shaving, eliminating the reconstruction of grid.

Reliable

- Redundant architecture eliminates single point of failure
- S-ECO mode: non-interruptible mode transferring



UPS5000-H-
400/500/600kVA



UPS5000-H-
800kVA



UPS5000-H-
1200kVA



UPS5000-H-
1600kVA

Specifications

Model		UPS5000-H-400/500/600k	UPS5000-H-800k	UPS5000-H-1200k	UPS5000-H-1600k
Capacity	Rack Capacity	400/500/600kVA(380/400/415Vac) 200/250/300kVA(200/208/210Vac)	800kVA	1200kVA	1600kVA
	Module number	2-4/2-5/2-6	2-8	2-12	2-16
Mains Input	Input Wiring	3Ph+N+PE			
	Rated Voltage	200/208/210/380/400/415Vac	380/400/415/480Vac	380/400/415Vac	
	Voltage Range	380/400/415V: 138-485Vac (100% load: 323-485V) 200/208/210V: 139-260Vac (100% load: 170-260V) 480V: 192-528Vac (100% load: 409-528V)			
	Frequency Range	40-70Hz			
	Total Harmonic Distortion	Normal mode: THDi<3% for 100% linear load S-ECO mode: THDi<3% for 100% linear load			
	Input Power Factor	Normal mode: 0.99; S-ECO mode: 0.99			
Bypass Input	Input Wiring	3Ph+N+PE			
	Rated Voltage	200/208/210/380/400/415Vac	380/400/415/480Vac	380/400/415Vac	
	Input Frequency	50/60±6Hz			
Battery	Rated Voltage	200/208/210Vac: 180-600Vdc (The number of VRLA can be selected from 15 to 50; 20 batteries rated, no battery neutral, support odd battery number); 380/400/415/480Vac: 360-600Vdc (The number of VRLA can be selected from 30 to 50; 40 batteries rated, no battery neutral, support odd battery number); 512Vdc(Huawei SmartLi)			
	Maximum charge capacity and current	Single power module: 15%, 30A			
	Battery Category	Huawei SmartLi, VRLA			
	Battery sharing	Support (VRLA)			
Output	Output Wiring	3Ph+N+PE			
	Voltage	200/208/210/380/400/415Vac ±1%	380/400/415/480Vac c±1%	380/400/415Vac ±1%	
	Frequency	Tracking the bypass input (Normal mode); 50/60Hz±0.25% (Battery mode)			
	THDv	THDv<1% for linear load			
	Overload Capacity	Inverter: 100%<load≤110% for 60 minutes, then transfer to bypass mode; 110%<load≤125% for 10 minutes, then transfer to bypass mode; 125%<load≤150% for 1 minute, then transfer to bypass mode			
System	Output Power Factor	1			
	Efficiency	Normal mode: Up to 97% S-ECO mode: Up to 99%			
	Source share mode	Support main input and battery joint operating			
	Parallel	4	4	3	1
Environment	Operating Temperature	0-40°C			
	Storage Temperature	-40-70°C			
	Relative Humidity	0%-95% (No condensing)			
	Operating Altitude	0-1000m. Above 1000m, derating based on EN/IEC 62040-3			
Others	Weight	580/690/800kg	1300kg	1500kg	1900kg
	Height*Width*Depth(mm)	2000*800*1000	2000*1600*1000	2200*1600*1000	2200*2400*1000
	Standards and certifications	Standards: EN/IEC 62040-1, EN/IEC 62040-2, EN/IEC 62040-3 Certifications: CE; CB; RoHS, REACH, WEEE, etc.			
	Communications ports and protocol	Communications ports: Dry contacts, RS485, FE Communications protocol: Web, Modbus and SNMP			

Note: Tier4 or Tier3 levels specified in T1942 are required, that two UPSs form a dual bus or a UPS and utility form dual bus for important systems related to major economy or public safety, such as civil aviation management centers, financial liquidation centers and trading centers, etc.