

FusionPower Series

UPS5000-A- (400-600kVA)

Introduction

Huawei UPS5000-A (400-600kVA) 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

Reliable

- Wide input voltage range to minimize battery use: 485-305 V for 100% load; 305-138 Vac for 100%-40% load (derating linearly)
- Better load adaptability: high output power factor up to 1 and no derating for capacitive or inductive devices with a PF>0.5

Efficient

- High efficiency of up to 96%, reducing power consumption effectively
- High power density of up to 300kVA per rack, 50% footprint saving

Simple

- Flexible battery configuration: 30-44 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		400kVA/400kW	500kVA/500kW	600kVA/600kW
Mains Input	Input Wiring	3Ph+N+PE		
	Rated Voltage	380/400/415Vac		
	Voltage Range	138-485Vac		
	Frequency Range	40-70Hz		
	Total Harmonic Distortion	THDi<3% for 100% linear load		
	Input Power Factor	0.99		
Bypass Input	Input Wiring	3Ph+N+PE		
	Rated Voltage	380/400/415Vac		
	Input Frequency	50/60 ± 6Hz		
Battery	Rated Voltage	360-528Vdc (The number of batteries can be selected from 30 to 44; 40 batteries in default)		
Output	Output Wiring	3Ph+N+PE		
	Rated Voltage	380/400/415 Vac ± 1%		
	Frequency	Tracking the bypass input (Normal mode); 50/60 Hz ± 0.05% (Battery mode)		
	Waveform	Sine wave (THDv<1% for 100% linear load)		
	Overload Capacity	110% overload for 60 minutes; 125% overload for 10 minutes; 150% overload for 1 minute		
System	Output Power Factor	1		
	Efficiency	96%		
	Expandability	Up to 8 units connected in parallel		
Environment	Operating Temperature	0-40°C		
	Storage Temperature	-40 to 70°C		
	Relative Humidity	0%-95% (No condensing)		
	Operating Altitude	0-1000m. Above 1000m, derating rate based on EN/IEC 62040-3		
	Audible Noise	66-75dB		
Others	Height × Width × Depth (mm)	2000 × 1200 × 850		2000 × 1400 × 850
	Weight	710kg	850kg	1100kg
	Certifications	EN/IEC 62040-1; EN/IEC 62040-2; EN/IEC 62040-3; CE; CB; RoHS, REACH, WEEE, etc.		
	Communications	Dry contacts, RS485, SNMP		

Remark: For important systems that are related to important economic interests or public security, such as civil aviation management center, financial clearing center, and trading center, the Tier IV or Tier III power supply level specified in T1942 must be used. That is, two UPSs form dual-bus power supply or the UPS and mains form dual-bus power supply.