

UPS5000-E Series (40-320kVA)

Features

High Reliability

- 5 kA lightning protection design on input port to reduce lightning-related failure rate
- 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)
- 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

Low Power Consumption

- High efficiency: 96% for 40% rated load; 95% for 20% rated load
- Intelligent hibernation technology to keep UPS operating at high efficiency (available in both single and parallel configuration)

Small Footprint

- High power density: 40 kVA per 3U height
- Front maintenance and back-to-wall installation
- Only 0.5 m² floor space taken up by single cabinet

High Availability

- Modularized design, expanding as required
- Hot swappable power module, bypass module and control module, easy to maintain and expand
- High output power factor up to 1 and no derating for devices with a PF>0.5
- Highly expandable design: up to 32 modules paralleled together

Easy Management

- 7-inch colored LCD showing real-time operation status in various languages
- Various communication interfaces including SNMP, dry contacts, RS485
- NetEco network manager, supporting concentrated management to all the UPSs

Intelligent Battery Management

- Flexible battery configuration : 30 to 40 cells per string
- One battery string that can be shared by all the UPSs in parallel configuration
- Intelligent temperature compensation
- Battery dormancy technology to extend the battery lifespan



Application Scenarios

- Large/Medium Data Centers
- Large/Medium Offices
- Automatic Devices
- Laboratories

Optional Components

- Dry Contact Extended Card
- Backfeed Protection Card
- Antiseismic Kit
- IP21 Kit
- Top Outlet Kit
- Input Power Distribution Cabinet
- Output Power Distribution Cabinet
- BCB Box
- Battery Switch Box
- Battery Inspection System
- Battery Grounding Failure Detection Instrument
- Battery Temperature Sensor



Specifications

Model	UPS5000-E-40K/80K/120K/160K/200K/240K/280K/320K	
Rated Capacity (kVA/kW)	40/80/120/160/200/240/280/320	
Input		
Mains	Input Wiring	3Ph+N+PE
	Rated Voltage	380/400/415 Vac
	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 ± 0.25%(Battery Mode)
	Waveform	Sine wave, THDv < 1% for linear load, THDv < 3% for non-linear load
	Output Power Factor	1
	Output Imbalance	Voltage imbalance: ± 3%; phase imbalance: ± 2°
	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
Environment		
	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 1% for each additional 100 m
	Audible Noise	< 65 dB
Others		
	Height × Width × Depth (mm)	2000 × 600 × 850
	Weight	227/260/293/326/359/484/517/550 kg
	EMC	EN/IEC 62040-2; IEC61000-4-2; EN61000-4-3; EN61000-4-6
	Safety	EN/IEC 62040-1; YD/T1095-2000; GB/T4715-93
	Communications	Dry contacts, RS485, SNMP

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