

# FusionPower Series

## UPS5000-A-(30-120kVA)

### Introduction

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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

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- 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

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#### Reliable

- Wide input voltage range to minimize battery use: 485-305 Vac for 100% load; 305-138 Vac for 100%-40% load (derating linearly)
- High output power factor of up to 1 (30/40/80kVA), 30% more load driven than traditional UPS

#### Efficient

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

#### Simple

- Rack/tower convertible, suitable for different installation scenarios
- Flexible battery configuration: 30-44 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) |                             | 30kVA/30kW                                                                                                                                                                           | 40kVA/40kW | 60kVA/54kW       | 80kVA/80kW | 120kVA/108kW |
|-------------------------|-----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|------------------|------------|--------------|
| 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; 30/40/80kVA 32 batteries in default, 60/120kVA 40 batteries in default)                                           |            |                  |            |              |
| Output                  | Output Wiring               | 3Ph+N+PE                                                                                                                                                                             |            |                  |            |              |
|                         | Rated Voltage               | 380/400/415Vac ± 1%                                                                                                                                                                  |            |                  |            |              |
|                         | Frequency                   | Tracking the bypass input (Normal mode); 50/60Hz ± 0.05% (Battery mode)                                                                                                              |            |                  |            |              |
|                         | Waveform                    | Sine wave (THDv<1% for 100% linear load)                                                                                                                                             |            |                  |            |              |
|                         | Overload Capacity           | 30/40/80kVA: 110% overload for 60 min; 125% overload for 10 min; 150% overload for 1 min<br>60/120kVA: 110% overload for 60 min; 125% overload for 10 min; 150% overload for 0.5 min |            |                  |            |              |
| System                  | Output Power Factor         | 30/40/80kVA: 1; 60/120kVA: 0.9                                                                                                                                                       |            |                  |            |              |
|                         | Efficiency                  | Up to 95.7%                                                                                                                                                                          |            |                  |            |              |
|                         | 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               | 58-64dB                                                                                                                                                                              |            |                  |            |              |
| Others                  | Height × Width × Depth (mm) | 500 × 264 × 800                                                                                                                                                                      |            | 1020 × 440 × 850 |            |              |
|                         | Weight                      | 70kg                                                                                                                                                                                 |            | 140kg            |            | 170kg        |
|                         | 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.