

MicroMate®

Uninterruptible Power Supply Systems



ZB Series

Tower

High Frequency Online UPS



Data Center



Local area
Networks



Industrial
Processes



Servers

1 ~ 10KVA (1 Ph in / 1 Ph out)

10 ~ 20KVA (3 Ph in / 1 Ph out)

Product snapshot:

Model: 1-10KVA (1Ph in/1Ph out)

Model: 10-20KVA (3Ph in/1Ph out)

Nominal voltage: 220/230/240VAC (1-10KVA)

Nominal voltage: 380/400/415VAC (10-20KVA)

Nominal frequency: 50/60Hz

Output Power factor: 0.8 or 0.9

Stable and Reliable, Comprehensive Protection

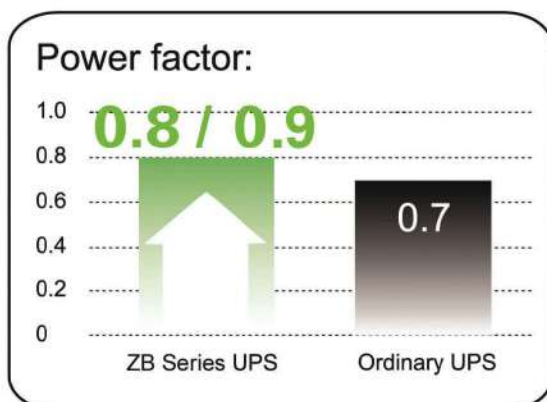
ZB Series 1-20KVA adopts the double conversion online architecture ideal for resolving all issues on power supply. This state-of-the-art solution is especially designed for eliminating the power loss, extra high or low voltage of utility power, voltage sags or damped oscillation, high-voltage pulse, voltage fluctuation, surge voltage, harmonic distortion, clutter immunity, and frequency fluctuation etc., delivering safe and reliable power supply guarantee for user's load.

Key Features

- Its cut-edge digital technology of DSP (Digital Signal Processor), can greatly improve the products performance and system reliability, and deliver a compact integration with higher power density;
- Output power factor up to 0.8 or 0.9 applicable to the tendency of future load evolution, and deliver higher payload capacity;
- Higher payload and overload capability, better load compatibility, and suitable for various load type;
- Total power factor up to 90% can minimize the power loss of UPS and utilization cost for user;
- High Scalability: fully meet the customer's demands;
- Emergency Power Off (EPO): UPS can be instantly shut off in case of any emergency;
- Powerful Interference immunity capability in compliance with EMC requirements of IEC61000-4, deliver your device a clean electric environment.

Tailored for Grid Environment

- Output power factor up to 0.8 or 0.9 applicable to the tendency of future load evolution, and deliver higher payload capacity;
- Total efficiency of more than 90% can minimize the power loss of UPS and utilization cost for user;
- Active power factor correction (PFC) technology allows the input power factor approaching to 1, dramatically reducing the immunity on utility grid;
- Wider range of input voltage tailored for all severe environments;
- Excellent input frequency range makes UPS suitable to different power supply devices, i.e. generator set.



High Reliability

- Its cut-edge digital control technology of DSP (Digital Signal Processor) can deliver higher quality, performance and reliability;
- Higher payload and overload capability, better load compatibility, and suitable for various load type;
- Powerful Interference immunity capability in compliance with EMC requirements of IEC61000-4, deliver your device a clean electric environment.

Flexible Configuration on Demand

- High Scalability: fully meet the customer's demands;
- Online Intervention: safe and online intervention without any power supply interruption to load;
- Emergency Power Off (EPO): UPS can be instantly shut off in case of any emergency;
- Parallel Kit: realize the parallel extension and redundancy function, offer more flexibility and safety for user's power supply planning;
- Isolating Transformer: offer isolation protection for the user.

Intelligent battery management

- With its advanced intelligent charge control mode, UPS can automatically select the optimal charge mode according to the battery type and conditions, thus further maximizing the lifespan of battery bank. In addition, the system can periodically conduct the charge & discharge management for the battery bank. User also can select the battery voltage (192V or 240V) on demands;
- The user can query and set the proper UPS control parameters for intelligent UPS management; automatically identify and adapt to 50/60Hz power supply system, fulfilling the requirements in various power supply systems;
- Perfect failure protection and alarm function: provide complete failure protection and clear alarm notification function in case of I/O over-voltage or under-voltage, battery over-charge or under-voltage, overload, and short circuit.

Compact Design, Lower Noise

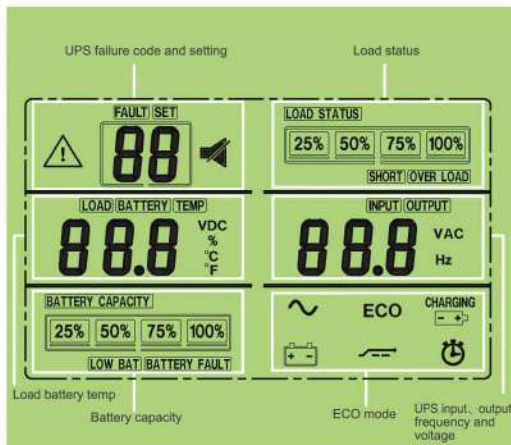
- With leading control technology and craftsmanship, this UPS can greatly increase the power density and reduce the footprint, therefore save more expensive space in your office environment. Additionally, its lower noise during operation can allow you a more comfort working environment.

Rich Communication and Monitoring Features

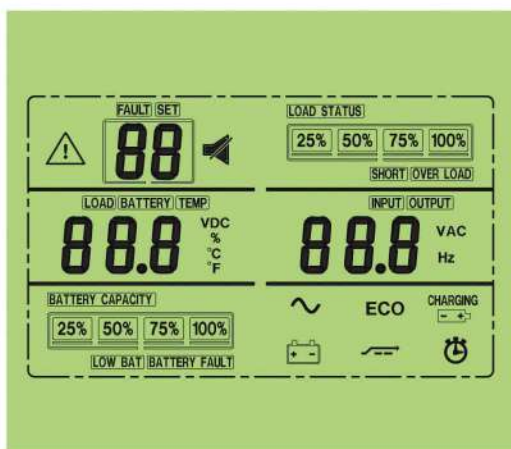
- Provide RS232, USB interface and communication cable for local or remote power supply management;
- Provide intelligent slot available to Web Power (SNMP), CMC, or AS400 card (dry contact) for remote management and monitoring function.

User-friendly interface

- LCD display accurate UPS working environment and working status to the user, through the LCD display panel can be set output voltage and frequency, at the same time can be set ECO mode, convenient for user to operate the UPS.



LCD Panel instruction



LCD display information

Intelligent Power monitoring and Management Software WinPower2003

- Support Microsoft Windows95/Me/NT/2000/XP/Linux operating system. Suit for TCP/IP local area network;
- Support TCP/IP network monitoring; Provide a hierarchical directory structure management network; Unusual event can be notified to user through broadcast, e-mail, messenger call or mobil messenger; Automatically detect the UPS model and the communication port; Provide password protection;
- Support timing boot up / shut off UPS function;
- Support timing UPS self-test function;
- Support graphically displayed UPS status function in real time;
- Support network to deactivate the function of multiple servers and workstations;
- Support Smart Event function, so that the user can defined according to their needs;
- Accept the abnormal power;
- Support to shut off most of the applications and the preservation of related document;
- Support for English and multi-language platform;
- Support the online help function; with data records (including mains, UPS, load, battery), and event function, to convenient the system administrator for the routine maintenance.



ZB Series Tower Online UPS 1KVA to 10KVA (1-Phase / 1-Phase) 10KVA to 20KVA (3-Phase / 1-Phase)

Technical Specifications

| Model | Standard | ZB1K-11 | ZB2K-11 | ZB3K-11 | ZB6K-11 | ZB10K-11 | ZB10K-31 | N.A. | | |
|-------------------------------|--|--------------------|-----------------|-----------------|---|---------------------------------------|-----------------|-----------|-----------|--|
| | S-Model | ZB1KS-11 | ZB2KS-11 | ZB3KS-11 | ZB6KS-11 | ZB10KS-11 | ZB10KS-31 | ZB15KS-31 | ZB20KS-31 | |
| Capacity | | 1KVA | 2KVA | 3KVA | 6KVA | 10KVA | | 15KVA | 20KVA | |
| Nominal Voltage | 220 / 230 / 240VAC 1-phase 2 wire + G | | | | | 380 / 400 / 415VAC 3-phase 4 wire + G | | | | |
| Nominal Frequency | 50Hz / 60Hz | | | | | | | | | |
| Input | | | | | | | | | | |
| Voltage Range | 115 ~ 300VAC | | | 120 ~ 275VAC | | 115 ~ 300VAC | 120 ~ 275VAC | | | |
| Frequency Range | 50Hz: (46 ~ 54Hz) ; 60Hz: (56Hz ~ 64Hz) | | | | | | | | | |
| Power Factor | > 0.98 | | | 0.99 | | > 0.98 | 0.99 | | | |
| Output | | | | | | | | | | |
| Voltage Precision | 220 / 230 / 240 X (1±2%)VAC | | | | | | | | | |
| Frequency Precision | 50 / 60Hz ±0.05Hz | | | | | | | | | |
| Power Factor | 0.8 / 0.9 | | | | | | | | | |
| Output Power | 800 / 900W | 1600 / 1800W | 2400 / 2700W | 4800 / 5400W | 8000 / 9000W | | 12 / 13.5KW | 16 / 18KW | | |
| Harmonic Distortion | Linear load <3% , Non-linear load <6% | | | | | | | | | |
| Overload Capacity | load > 110% for 47s ; load > 150% for 25s ; load > 200% for 30ms ; | | | | 105% < load ≤ 125%, for 60s; 125% < load ≤ 150%, for 30s; load > 150% for 0.5s. | | | | | |
| Current Crest Ratio | 3 : 1 | | | | | | | | | |
| Transfer Time | 0ms (AC mode ↔ DC mode) ; (AC mode ↔ Bypass < 4ms) | | | | | | | | | |
| Battery | | | | | | | | | | |
| DC Voltage | 36VDC | 72VDC | 96VDC | 192 or 240VDC | | | | | | |
| Recharge Time | 5 hours to 90% (standard model with built-in battery) | | | | | | | N.A. | | |
| Charging Current | Standard | 1A | | | 2A | | N.A. | | | |
| | S-Model | 4A / 8A (Optional) | | | 4A | | 4A | | | |
| Panel Display | | | | | | | | | | |
| LCD | UPS status, input / output voltage and frequency, battery voltage, capacity, load temperature, history records, adjust voltage, ECO mode | | | | | | | | | |
| Communication | | | | | | | | | | |
| Communication Port | RS232, SNMP card (optional), USB port (Optional) | | | | | | | | | |
| Working Environment | | | | | | | | | | |
| Temperature | 0°C ~ 40°C | | | | | | | | | |
| Relative Humidity | 0 ~ 95% (Non-condensing) | | | | | | | | | |
| Storage Temperature | -25°C ~ 55°C | | | | | | | | | |
| Elevation | 1500m | | | | | | | | | |
| Noise Level | < 45dB | < 50dB | | | | | < 55dB | | | |
| Physics Characteristic | | | | | | | | | | |
| Weight (KG) | Standard with Built-in Batteries | N.W | 12.0 | 23.0 | 31.5 | 57.0 | 67.5 | 72.0 | N.A. | |
| | | G.W | 14.0 | 25.5 | 33.5 | 59.0 | 70.0 | 76.0 | N.A. | |
| | S-Model without Batteries | N.W | 6.5 | 10.5 | 14.0 | 18.0 | 20.0 | 20.0 | 35.0 | |
| | | G.W | 8.0 | 13.0 | 16.5 | 24.0 | 24.0 | 24.0 | 39.0 | |
| Dimension W*D*H (mm) | Standard UPS Module | 145 x 355 x 220 | 190 x 383 x 318 | 190 x 433 x 318 | 248 x 500 x 616 | | | N.A. | | |
| | S-Model UPS Module | | | | 248 x 500 x 460 | | 248 x 500 x 616 | | | |

Note: N.A. = Not Available

STANDARD: Conform to GB / IEC regulation: EMC: GB7260.0 / IEC62040-2 GB / 17626.2~5 / IEC61000-4-2~5 SAFETY: GB4943

NOTE: Product specifications are subject to change without further notice