# 1/1 Phase 6-20KVA WTHD Low frequency online UPS

### **Application** area:

- ★ Industrial application protection
- $\star$  Power supply protection for important institutions such as transportation, electric power, medical treatment and venues
- ★ Small data room/Communication network management center
- ★ Office automation/Experimental instruments and equipment

### **Product description:**

The dual-transform topology is adopted, the input is equipped with a harmonic suppressor, the inverter is SPWM pulse width modulation technology, ICBT power module, and the output is equipped with an isolation transformer to provide a sine wave power supply with stable frequency and voltage stabilization, non-interference, purity and low distortion for the load, which has the characteristics of strong load carrying capacity and good compatibility, and meets the requirements of high reliability, high stability and high quality of uninterruptible power supply in various industries

### **Product characteristics:**

#### **†** Advanced design

Online double transformation, completely isolating the impact of various grid pollution on the load of the mains or generator, output isolation transformer, with impact load capacity

#### Strong overload capacity

Super strong output overload and short circuit capacity, ensuring system stability and system safety under limit state

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Rectifier input anti-surge board design, strong grid adaptability

#### Strong environmental adaptability

Wide voltage input range, avoiding frequent switching to battery power supply mode, wide input frequency range, stable access to various fuel generators, and adapt to harsh grid environment

#### Intelligent fan speed regulation

Through software sampling and calculation, the fan speed is automatically adjusted according to the internal temperature and load size to effectively reduce noise; Extend fan service life and save energy

#### **†** Comprehensive protection measures

Power-on self-diagnosis function, equipped with complete protection device, providing output overload, short circuit, inverter overtemperature, battery undervoltage, battery overcharge, surge protection, software and hardware dual protection; Multi-functional protection and warning, stable protection system

#### Flexible networking monitoring management

Standard R232 communication interface, optional dry power connection, R485, SNMP network adapter, flexible networking, real-time management of UPS operation

#### 7 Rich optional accessories

Dry contact/R485/SNMP/input isolation transformer/bypass isolation transformer

#### LCD+LED LCD+LED display

LCD+LED display, real-time display and recording of UPS working status, parameter information, etc., convenient for user management

#### → DC start function

It can be started directly by using battery, which is convenient for users

## **Product Specifications**

| Low frequency online UPS |                                    | WTHD-U-11006  | WTHD-U-11010 | WTHD-U-11015 | WTHD-U-11020 |
|--------------------------|------------------------------------|---|--------------|--------------|--------------|
| Rated capacity (KVA/KW)  |                                    | 6/4.8   | 10/8         | 15/12        | 20/16        |
| Main Input               | Phase                              | Single Phase Three Wire ( 1L+N+PE )   |              |              |              |
|                          | Input Voltage (Vac)                | 220/230   |              |              |              |
|                          | Voltage Range (Vac)                | 160 ~ 275   |              |              |              |
|                          | Frequency range (Hz)               | 50 (60) +10%  |              |              |              |
|                          | Power factor                       | >0.95 (with filter)   |              |              |              |
| -)                       | Phase                              | Single Phase Three Wire ( 1L+N+PE )   |              |              |              |
|                          | Input Voltage (Vac)                | 220/230   |              |              |              |
|                          | Voltage Range (Vac)                | 160 ~ 275   |              |              |              |
|                          | Frequency range (Hz)               | 50 (60) ±5%   |              |              |              |
| Output                   | Output Voltage (Vac)               | 220±1%/230±1%   |              |              |              |
|                          | Power factor                       | 0.8   |              |              |              |
|                          | Output Frequency (Hz)              | 50(60)  |              |              |              |
|                          | Output Waveform                    | Sine wave THDV less than 2% (pure linear load)  |              |              |              |
|                          | Switching time (ms)                | 0 ms  |              |              |              |
|                          | Machine efficiency                 | > 85% 92%   |              |              |              |
|                          | Overload capacity                  | 100%~110%:online operation; 110%~125%: 20s to bypass; >150%: 1s to bypass<br>(100%~110%: ; 110%~125%:20s; >150%: 1秒转)       |              |              |              |
| Battery                  | Battery Voltage (Vac)              | 192V  |              |              |              |
| Environment              | Ambient operating temperature (°C) | - 10 ~ 40   |              |              |              |
|                          | Storage temperature (°C)           | -25 ~ 55 (without battery)  |              |              |              |
|                          | Relative humidity                  | 0 ~ 95% (no frosting)   |              |              |              |
|                          | Working altitude                   | < 1500m , use derating according to GB/T3859.2  |              |              |              |
|                          | Noise (dB)                         | <55 (1 meter away from the device)  |              |              |              |
| Other features           | Alarm function                     | Output overload, mains abnormality, UPS fault, battery undervoltage, etc.   |              |              |              |
|                          | Protective function                | Output short circuit, overload, over temperature, battery under voltage, output over and under voltage, f<br>failure alarm. |              |              |              |
|                          | Communication function             | Standard: RS232, Optional (): RS485/SNMP/Dry Contact  |              |              |              |
| Mechanical Features      | Dimensions ( W*D*H mm )            | 300*600*810   |              |              |              |
|                          | Net weight (kg)                    | 67  | 100          | 120          | 220          |
|                          | Implementation standard            | YD/T1095-2017   |              |              |              |





