

# 3/1 Phase 10-40KVA

## WTHD Low frequency online UPS

### Application area:

- ★ Industrial application protection
- ★ 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, IGBT 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

#### ⚡ Input anti-surge design

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

#### ⚡ 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-31010	WTHD-U-31020	WTHD-U-31030	WTHD-U-31040
Rated capacity (KVA/KW)		10/8	20/16	30/24	40/32
Main Input	Phase	Three Phase Five Wire ( 3L+N+PE )			
	Input Voltage (Vac)	380			
	Voltage Range (Vac)	304 ~ 456			
	Frequency range (Hz)	50 (60) +10%			
	Power factor	>0.95 (with filter)			
Bypass Input	Phase	Single Phase Three Wire ( L+N+PE )			
	Input Voltage (Vac)	220			
	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			
	Overload capacity	105%~110%: 60min to bypass; 110%~125%: 10min to bypass; >125%: 10s to bypass			
Battery	Battery Voltage (Vac)	192V	240V	384V	
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, fan failure alarm.			
	Communication function	Standard: RS232, Optional (): RS485/SNMP/Dry Contact			
	Dimensions ( W*D*H mm )	400*750*1010			
Mechanical Features	Net weight (kg)	135	245	300	520
	Implementation standard	YD/T1095-2017			