

Online Transformerless UPS Series

Power range: 10~150kVA (3-Level PF: 1.0)

Mode: 3 phase input and 3 phase output

Module: 10/15/20/25/30kVA



Features

Modular Design

- ◆ All units adopt modular design, including power module, bypass module, monitoring module, can be easily integrated
- ◆ Power module, Bypass module, Monitoring module, ECU control module, all these modules are hot-swappable

High Reliability

- ◆ Wide input voltage range, line voltage range is 138-485V, UPS will derate to 40% when input voltage is below 305V
- ◆ UPS adopts multiple digital bus and redundancy parallel control system, making sure the whole system keep online if any single circuit fail
- ◆ The UPS will keep on single or parallel working, if any module fail
- ◆ Thickened conformal coating, applicable for harsh environment such as high heat, high humidity, dust

Green and Power Saving

- ◆ High input power factor, it is up to 0.99
- ◆ 3-level topology design, online efficiency up to 95.8%
- ◆ THDi<3% (100% linear load)
- ◆ The UPS will work in sleeping mode when the load is very small (Settable)

LBS Function

- ◆ LBS function can realize 2 independent UPS system work in synchronization, and it enhances the reliability of the system

Parallel Redundancy Function

- ◆ Support parallel expanded operation: maximum is 8 units
- ◆ Support sharing batteries for the UPS in parallel

Flexible Battery Configuration

- ◆ Batteries number of each group can be selected from 30 pieces to 50 pieces
- ◆ Large charging current can meet the requirement of long time backup

Strong Load Capability*

- ◆ Output power factor is 1.0, UPS can supply power to 100% unbalanced load
- ◆ High adaptability for load, it can connect full inductive load or capacitive load

Intelligent Management

- ◆ With 7 inches (Standard) and 10 inches (Optional) colorful touch LCD screen
- ◆ Support recording and exporting history logs and fault logs
- ◆ Support SNMP, RS232, RS485, Dry contact interface
- ◆ Support upgrading FW&SW on line (In bypass mode)
- ◆ EPO & REPO function

Compatible with Generator

- ◆ Power Walk In function, it can reduce the start current impact to system, and it can reduce the capacity of generator

*This series of products are not compatible with energy feedback loads, including but not limited to CT machines in the medical field, cutting machines in the semiconductor industry, and all types of elevators as well as other motor-driven equipment that incorporate energy feedback inverters at the front end.

Technical Specifications

MODEL		30 kW	50 kW	45 kW	75 kW
Capacity (VA/W)	UPS Cabinet	30k	50k	45k	75k
	Module	10		15	
	Max. Number	3	5	3	5
MODEL		60 kW	100 kW	50 kW	125 kW
Capacity (VA/W)	UPS Cabinet	60k	100k	50k	125k
	Module	20		25	
	Max. Number	3	5	2+1 (Redundancy)	5
MODEL		60 kW		150 kW	
Capacity (VA/W)	UPS Cabinet	60k		150k	
	Module	30			
	Max. Number	2+1 (Redundancy)		5	
INPUT					
Nominal Voltage (Vac)		380/400/415 (3Ph+N+PE)			
Operating Voltage Range (Vac)		138~305 for 40% load; 305~485 for 100% load			
Power Factor		0.99			
Harmonic Distortion (THDi)		3% (100% Linear load)			
Bypass Voltage Range (Vac)		Max. voltage: 220: +25% (Optional +10%, +15%, +20%) 230: +20% (Optional +10%, +15%) 240: +15% (Optional +10%) Min. voltage: -45% (Optional -10%, -15% -20%, -30%)			
Bypass Frequency Range (Hz)		50/60±10%			
OUTPUT					
Nominal Voltage (Vac)		380/400/415 (3PhNPE)			
Voltage Regulation		±1%			
Output Frequency (Hz)		Line mode: Synchronize with input, when the input frequency ≥10% (±1%/±2%/±4%/±5% optional), output 50/60 (±0.1); Bat. mode: (50/60±0.1%)			
Crest Factor		3:1			
Harmonic Distortion (THDv)		1% with linear load; 3% with nonlinear load			
Overload	Inverter mode	110% 60min, 125% 10min, 150% 1min, >150% 1.2s shut down inverter			
	Bypass mode	30: 135% for long term; 40: 125% for long term; >1000%, 100ms			
EFFICIENCY*					
AC Mode		Up to 95.8%			
ECO Mode		Up to 99%			
HECO Mode		Up to 99%			
BATTERY					
Battery Type		VRLA (Lead acid maintenance free battery)			
Battery Voltage (Vdc)		±180/192/204/216/228/240/252/264/276/288/300 (30/32/34/36/38/40/42/44/46/48/50pcs, 36pcs default, 36~50pcs output power factor 1.0, 32~34pcs output power factor 0.9, 30pcs output power factor 0.8)			
Charging Current (Max.)(A)		18			
MANAGEMENT					
LCD Display		Line voltage, Bypass Mode, Battery Low, Battery Fault, Overload & UPS Fault			
Alarm		Line Failure, Battery Low, Overload, System Fault			
Communication Ports		RS232, RS485, Parallel, LBS, BMS, Dry contact port, Relay card (Optional), SNMP card (Optional), Battery temperature sensor (Optional)			
SYSTEM FEATURES					
Overheat		Line Mode: Switch to Bypass; Backup Mode: Shut down UPS immediately			
Self-diagnostics		Upon Power On and Software Control			
Generator Input		Support			
EPO		Shut down UPS immediately			
ENVIRONMENTAL					
Operating Temperature (°)		0~40			
Storage Temperature (°)		-25~55			
Humidity Range		0~95% (Non condensing)			
Altitude (m)		<1000, derating required when >1000			
Noise Level (dB)		<58		<61	
PHYSICAL					
Dimension WxDxH (mm)	UPS Cabinet	6008501200			
	Power Module	44062086 (2U)			
Weight (kg)	UPS Cabinet	130~145		145~170	
	Power Module	10kVA: 19; 15~30kVA: 21			
STANDARDS					
Safety		IEC/EN 62040-1, IEC/EN 62477-1			
EMC		IEC/EN 62040-2 (IEC 61000-2-2, IEC 61000-4-2, IEC 61000-4-3, IEC 61000-4-4, IEC 61000-4-5, IEC 61000-4-6, IEC 61000-4-8, IEC 61000-4-11)			
Performance		IEC 62040-3: 2021, EN IEC 62040-3: 2021			

*This efficiency is a typical value measured under standard test conditions and may vary slightly depending on the actual operating environment and conditions.

1. Specifications are subject to change without prior notice

2. Data above are typical values for reference only, not as a basis for engineering design