

**BROCHURE**



## **Tower Series**

### **High Frequency Online UPS**

**- 1KVA ~ 40KVA Tower UPS -**



Single phase input, single phase output / Three phase input single phase output



Three phase input, single phase output / Three phase input three phase output

## ↪ Range of Application

Tower online all intelligent high frequency pure online UPS, which are generally used on places required high quality electricity, such as hospital equipment's, corporations, IT loading equipment's, industrial computer terminals. As UPS inverter circuit always in a state of work, the stored energy of UPS can be inverted and output alternating current without switching. Tower series UPS support different types of operation systems, apply to TCP/IP Local LAN and support the networking monitoring of UPS.

## Product Features

- Support LBS synchronic control
- Intelligent fan speed regulation function
- Support bypass maintenance (three phase input single phase output)
- LCD display function, user friendly display interface
- Three-stage extensible charging design to ensure a more remarkable performance of the batteries
- Support parallel operation of more than 3 machines with shared battery packs;
- Support DC cold starting; without utility, the load can keep operating with the power offered by batteries
- Powerful charging function is convenient to extend the capacity of standby batteries. Intelligent charging mode even extending battery life to cut down expenditures.
- Support automatic restart function: when utility goes normal after UPS is shutdown under battery mode, UPS can automatic restart
- Good technical indicators: the approximate 1 input power factor, largely decreased the pollution to utility grid and improved the use ratio of grid, so Tower Series UPS are real eco-type power
- Support fun gas proofing, moisture proofing and salt spray fog proofing, in order to decrease or

## Function Features

- Advanced DSP digital control technology, guarantee high UPS performance, products stable and quality reliable.
- Zero switching time: When the city electricity is abnormal, UPS will turn to battery mode with zero time, which can effectively ensure the safety and reliability of the instruments.
- Green and Environment: Meet the State Administration of electronic information products' pollution control, will cause no harm to human and environment under normal usage.
- Frequency adaptive system: In order to meet different power system requirements, it can be set to fixed or automatic identification to fit for 50Hz/60Hz.
- Input power factor correction function enable the factor to be over 0.99 to avoid grid environment pollution, so as to save energy and decrease cost
- Wide input voltage and frequency range: Even in places where electricity environment is very bad, it can also keep stable work under utility supply mode, which decrease the number of battery discharge and prolog the service life of batteries.

Product Parameters

Model	X2-1101 (L)	X2-1102 (L)	X2-1103 (L)	X2-1106 (L)	X2-1110 (L)	
Capacity	1kVA / 0.8kW	2kVA / 1.6kW	3kVA / 2.4kW	6kVA / 4.8kW	10kVA / 8kW	
<b>Input</b>						
Connection Mode	Single Phase Earthing					
Input Voltage	200/208/220/230/240VAC					
Voltage Range	110~300VAC					
Frequency	40~70Hz					
Power Factor	≥0.99					
<b>Output</b>						
Output Voltage	200/208/220/230/240VAC					
Voltage Regulation	± 1%					
Frequency	Synchronous Correction Range	46~54Hz / 56~64Hz				
	Battery Model	50Hz ± 0.1Hz / 60Hz ± 0.1Hz				
Distortion (THDU)	≤3%					
Peak Coefficient	≥3:1					
Overload Capacity	110%, convey to bypass after 1h; 125, convey to bypass after 10min; 150%, convey to bypass after 1 min.					
Time Switching	Electric City/Battery	0ms				
	Inverter/Bypass	<4ms (standard environment)		0ms		
<b>Battery</b>						
Standard Machine	Battery Cells	2	4	6	16 (16-20 optional)	
	Charging Current	1.0A (Max)			2.0A (Max)	
	Battery Model	12V 9AH				
Long Lasting	Battery Cells	3	6	8	16 (16-20 optional)	
	Charging Current	1A/2A/4A/6A settable				
	Battery Model	Depends on the applicant				
<b>Control Management</b>						
City Electricity Model	≥91%			≥93%		
Battery Model	≥91%			≥93%		
<b>Display Interface</b>						
LCD/LED	Loading size, battery capacity, city electricity mode, battery mode, bypass mode, fault indication					
<b>Control Management</b>						
Intelligent RS-232/USB	Support Windows 2000/2003/XP/Vista/2008, Windows 7/8, linux, Unix and MAC					
Option SNMP	Support SNMP Internet Management					
<b>Environment</b>						
Temperature	0~40°C					
Relative Humidity	0~95% (Non condensing)					
Noise	<50dB@1m		<55dB@1m		<58dB@1m	
<b>Physical Character</b>						
Standard Machine	Size: Width x Depth x Height (mm)	145 x 282 x 220	145 x 397 x 220	190 x 421 x 318	190 x 369 x 688	190 x 442 x 688
	Net Weight (kg)	11	18	29	62	67
Long Lasting	Size: Width x Depth x Height (mm)	145 x 282 x 220	145 x 397 x 220		190 x 369 x 318	190 x 442 x 318
	Net Weight (kg)	6	8	9	13	17

Product Parameters

Model	X2-3110 (L)	X2-3115 (L)	X2-3120 (L)	X2-3130 (L)
Capacity	10kVA / 8kW	15kVA / 12kW	20kVA / 16kW	30kVA / 24kW
<b>Input</b>				
Connection Mode	Three-phase + four wire			
Input Voltage	380/400/415VAC			
Voltage Range	285~520VAC @ 100% Load; 176~520VAC @ 50% Load			
Frequency	40~70Hz			
Power Factor	≥0.99			
<b>Output</b>				
Output Voltage	200/208/220/230/240VAC			
Voltage Regulation	± 1%			
Frequency	Synchronous Correction Range	46~54Hz / 56~64Hz		
	Battery Model	50Hz ± 0.1Hz / 60Hz ± 0.1Hz		
Distortion (THDU)	≤2% (Linear load), ≤3% (Non-linear load)			
Peak Coefficient	≥3:1			
Overload Capacity	110%, convey to bypass after 1h; 125, convey to bypass after 10min; 150%, convey to bypass after 1 min.			
Time Switching	Electric City/Battery	0ms		
	Inverter/Bypass	0ms		
<b>Battery</b>				
Standard Machine	Battery Cells	16 (16-20 optional)	20 (18-20 optional)	
	Charging Current	1A/2A/4A/6A/12A settable		
	Battery Model	Depends on the applicant		
<b>Efficiency</b>				
City Electricity Model	≥93%			
<b>Display Interface</b>				
LCD/LED	Loading size, battery capacity, city electricity mode, battery mode, bypass mode, fault indication			
<b>Control Management</b>				
Intelligent RS-232/USB	Support Windows 2000/2003/XP/Vista/2008, Windows 7/8, linux, Unix and MAC			
Option SNMP	Support SNMP Internet Management			
<b>Environment</b>				
Temperature	0~40°C			
Relative Humidity	0~95% (Non condensing)			
Noise	<50dB@1m			<58dB@1m
<b>Physical Character</b>				
Size: Width x Depth x Height (mm)	190 x 442 x 318	190 x 575 x 318	250 x 815 x 826	
Net Weight (kg)	16	22	62	

 Product Parameters

Model	X2-3310 (L)	X2-3320 (L)	X2-3330 (L)	X2-3340 (L)
Capacity	10kVA / 8kW	15kVA / 12kW	20kVA / 16kW	30kVA / 24kW
<b>Input</b>				
Connection Mode	Three-phase + four wire			
Input Voltage	380/400/415VAC			
Voltage Range	285~520VAC @ 100% Load; 176~520VAC @ 50% Load			
Frequency	40~70Hz			
Power Factor	≥0.99			
<b>Output</b>				
Output Voltage	200/208/220/230/240VAC			
Voltage Regulation	± 1%			
Frequency	Synchronous Correction Range	46~54Hz / 56~64Hz		
	Battery Model	50Hz ± 0.1Hz / 60Hz ± 0.1Hz		
Distortion (THDU)	≤2% (Linear load), ≤3% (Non-linear load)			
Peak Coefficient	≥3:1			
Overload Capacity	110%, convey to bypass after 1h; 125, convey to bypass after 10min; 150%, convey to bypass after 1 min.			
Time Switching	Electric City/Battery	0ms		
	Inverter/Bypass	0ms		
<b>Battery</b>				
Standard Machine	Battery Cells	16 (16-20 optional)	20 (18-20 optional)	
	Charging Current	1A/2A/4A/6A/12A settable		
	Battery Model	Depends on the applicant		
<b>Efficiency</b>				
City Electricity Model	≥93%			
<b>Display Interface</b>				
LCD/LED	Loading size, battery capacity, city electricity mode, battery mode, bypass mode, fault indication			
<b>Control Management</b>				
Intelligent RS-232/USB	Support Windows 2000/2003/XP/Vista/2008, Windows 7/8, linux, Unix and MAC			
Option SNMP	Support SNMP Internet Management			
<b>Environment</b>				
Temperature	0~40°C			
Relative Humidity	0~95% (Non condensing)			
Noise	<58dB@1m	<60dB@1m		
<b>Physical Character</b>				
Size: Width x Depth x Height (mm)	190 x 442 x 318	190 x 575 x 318	250 x 815 x 826	
Net Weight (kg)	16	22	62	