

# 20kVA-100kVA On-Line UPS

Provide Uninterruptible and Perfect Power Supply for Mission-critical Equipment



## Overview

An Uninterruptible Power Supply, also called as a UPS system or UPS battery backup, protects connected equipment from power problems and provide backup power when the input power source or mains power fails. UPS with double conversion (On-Line) topology provides consistent, clean, and near perfect power with zero transfer time regardless of the condition of incoming power. It is ideal for small data centers, small and medium-sized enterprises, bank branches and other demanding power applications.

## Benefits

- User-friendly LCD display
- High output power factor at 0.9/1
- Sine wave output, 0ms transfer time between On-Line and battery modes
- RS232 port, USB port, optional Web/SNMP card are available for network management
- Optional external battery groups

## Key Features

### Security

- UPS system with EMI/RFI noise filter offers clean power for connected equipment by filtering out electromagnetic and radio frequency interference to improve picture and sound quality.
- In UPS system, lower THD means reduction in peak currents, heating, emissions, and core loss in motors, which can minimize the damage to the IT equipment.
- The UPS is allowed to be shut off in the event of an emergency through the Emergency power off (EPO) port. Cold start function can startup the UPS without utility.

### Adaptability & Reliability

- FS 20kVA-100kVA UPS systems come with a tower convertible design. Visual LCD display makes it easy to get the UPS status.
- Compatible with a generator, the On-Line UPS can continually converts incoming AC power (from the main power supply or a generator) into filtered DC power, and then reconverts it back into AC power with a pure sine wave, which is the clean power your sensitive equipment .
- When different backup time is required, it's of great importance to have the external battery configurable, which enhances the adaptability and reliability of the UPS system.
- FS 100kVA UPS system is modularized and adopts the N+X redundancy. It can flexibly increase the number of the UPS modules according to the load capacity.

### High Efficiency

- FS UPS system is controlled by digital signal processor (DSP), which enhance its performance and efficiency by self-protection, self-diagnostics and so on.
- With power factor corrected (PFC) technology, the UPS is able to reduce the amount of reactive power and increase true power used to do useful work.
- The 3-stage charging method extends the life of the batteries and guarantees fast charging.
- When the utility power is cut off or restored, it takes 0ms between the transfer of AC mode and battery mode.

## Technical Specification

### Overview

MODEL	UPS20KTP208T	UPS100KTP208T
UPS Topology	On-Line	On-Line
Phase	Three-Phase	Three-Phase

### Output

MODEL	UPS20KTP208T	UPS100KTP208T
Power Capacity (VA)	20k	100k
Power Capacity (W)	18k	100k
Power Module	No	Yes (20kVA/pcs, 5pcs in total)
Power Factor	0.9	1
Nominal Output Voltage	208V 3-PH	208V 3-PH
Output Voltages Supported	208V 3-PH	208V 3-PH
Voltage Regulation	± 1%	± 1%
Frequency Range (Line Mode)	50/60Hz ± 0.1%/1%/2%/4%/5%/10%	50/60Hz ± 1%/2%/4%/5%/10%
Frequency Range (Battery Mode)	50/60Hz ± 0.01Hz	50/60Hz ± 0.1%
Harmonic Distortion (Linear Load)	≤1%	≤2%
Harmonic Distortion (Non-linear Load)	≤3%	≤5%
Crest Factor	3:1	3:1
Transfer Time	0ms	0ms
Waveform	Pure Sine wave	Pure Sine wave
Outlet Type	Hardwire	Hardwire

## Technical Specification

### Input

MODEL	UPS20KTP208T	UPS100KTP208T
<b>Nominal Input Voltage</b>	208V 3-PH	208V 3-PH
<b>Input Voltage Range (At 40% Load)</b>	72-159Vac	66 - 166Vac
<b>Input Voltage Range (At 100% Load)</b>	96-159Vac	96-166Vac
<b>Frequency Range</b>	50/60Hz $\pm$ 10%	40~70Hz
<b>Power Factor</b>	$\geq$ 0.99	$\geq$ 0.99
<b>Plug Type</b>	Hardwire	Hardwire

### Battery

MODEL	UPS20KTP208T	UPS100KTP208T
<b>Compatible Battery Type</b>	Lead-Acid Battery	Lead-Acid Battery
<b>External Battery Voltage</b>	96/108/120/132/144Vdc Selectable	96/108/120/132/144/156Vdc Selectable
<b>Backup Time</b>	Depends on the capacity of external batteries	

### Communication and Management

MODEL	UPS20KTP208T	UPS100KTP208T
<b>Control Panel</b>	LCD Display	LCD Display
<b>Communications Interface</b>	RS232 Port, USB Port and Intelligent Slot	RS232 Port, USB Port and Intelligent Slot
<b>Web/SNMP Cards</b>	Optional	Optional
<b>Emergency power off (EPO)</b>	Yes	Yes

## Technical Specification

### Physical

MODEL	UPS20KTP208T	UPS100KTP208T
<b>Form Factor</b>	Tower	Tower
<b>Dimensions (H×W×D/mm)</b>	868x 250x 900mm	1600x 600x 850mm
<b>Dimensions (H×W×D/in.)</b>	34.17"x 9.84"x 35.43"	62.99"x 23.62"x 33.47"
<b>Net Weight</b>	79kg	258kg

### Environmental

MODEL	UPS20KTP208T	UPS100KTP208T
<b>Operating temperature</b>	0°C~40°C	0°C~40°C
<b>Storage temperature</b>	-25°C~55°C	-25°C~55°C
<b>Relative Humidity</b>	0~95% (non-condensing)	0~95% (non-condensing)
<b>Noise Level</b>	<58dB at 1m	<65dB at 1m



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