

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
Nominal Input Voltage	208V 3-PH	208V 3-PH
Input Voltage Range (At 40% Load)	72-159Vac	66 - 166Vac
Input Voltage Range (At 100% Load)	96-159Vac	96-166Vac
Frequency Range	50/60Hz ± 10%	40~70Hz
Power Factor	≥0.99	≥0.99
Plug Type	Hardwire	Hardwire

Battery

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

Communication and Management

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

Technical Specification

Physical

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

Environmental

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

Battery Parameters

MODEL	UPS20KTP208T	UPS100KTP208T
Typical Recharge Time	20	20
Battery Qty	16	40*3
Capacit /Ah	100	65
Battery Boxes	A16*1	A40*3
Max. DC Current (A)	113A	251A
Air Switch (A)	125A	Group battery cabinet: 100A Battery master air switch: 320A
Wire Diameter (mm²)	35	25/120



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