



PT SERIES ONLINE HIGH FREQUENCY UPS

PT Series Online High Frequency UPS

The 1-10KVA PT series Online high frequency UPS takes the three-level technique and soft switch design, with the active power factor correction (APFC) to make the input PFC can be higher as 0.99. The new design make our PT series with high energy density ratio, reduce the UPS machine size very much, and also less occupy the space in the server room. The digital control make UPS with much more stable system, and also have the well ability of self-defensive and fault diagnosis.

This series UPS can provide better solution for the different power problems, such as transient voltage sag, damped oscillation, high voltage pulse, surge voltage, harmonic distortion, noise wave interference, frequency fluctuation and others. Providing more reliable protection for the application and UPS itself.



PT1-10KVA Field of Application

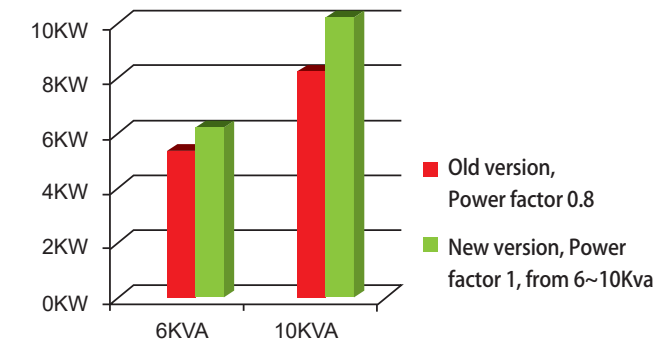
- IT and Network equipment
 - Small and Medium-sized data centers
 - Computer Server room
 - Production line control in factory
- Embedded and Automatic Control System
 - Telecommunication base station Automatic control system
 - Electrical and railway signaling systems
 - Security system
 - Television broadcast system
- Office and Business Equipment
 - Office computer and Printer
 - Scanner and MPOS



Product Function and Features

Green Power design for energy saving and environmental protection

- Different power configuration flexibility to achieve a multi - purpose machine, power customized available;
- Selectable digital charger from 1A ~12A, match for different appliance;
- Wide input voltage range: 208/220/230/240V for option;
- High efficiency up to 95.5%, lower power loss and save cost;
- Output power factor up to 1.0 ,as an industry leader, super high load efficiency;
- Green power ECO mode, power efficiency up to 98.5%
- Smart adjustable setting, support voltage compensation of output to transformer



The diagram of Loads capacity from 6~10Kva

Novel Features Upgraded

With three-level technology and soft switching design, minimizes to reduce switching losses and creates a new generation of more reliable and efficient power products.

Higher power factor

Input power factor ≥ 0.99 , output power factor up to 1.0, performance with super high load efficiency.

Higher efficiency

1-10KVA, the maximum efficiency is up to 95.5%. In ECO mode, the efficiency is up to 98.5%, saving energy and electricity for you.

Larger charging current

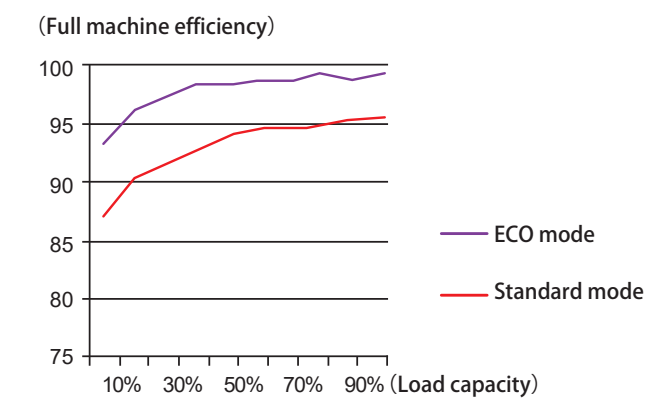
All models of this series can support 1A~12A charging current, and can flexibly configure battery combinations with different capacitances.

Wider frequency adjustment

Frequency can be setup in 50hz/60hz ± 10 Hz, with wider frequency adjustment range to match the input characteristics of the generator.

Higher design standards

All models are designed to comply with standards EN/IEC 61000, EN/IEC 62040, GB/T7260, GB/T4943, YD/T1095, TLC, which greatly reduces the interference to the power grid and the equipment used, and protects the user's equipment well.

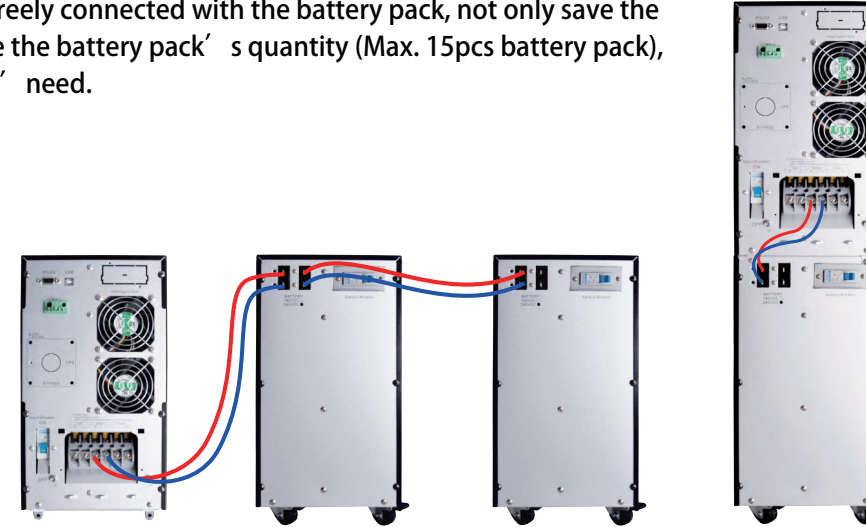


The diagram of 1-10K efficiency under mains supply

UPS Performance and Features

Can connected with multiple battery pack in parallel.

Long back up UPS can be freely connected with the battery pack, not only save the space, we also can increase the battery pack's quantity (Max. 15pcs battery pack), to meet the different users' need.

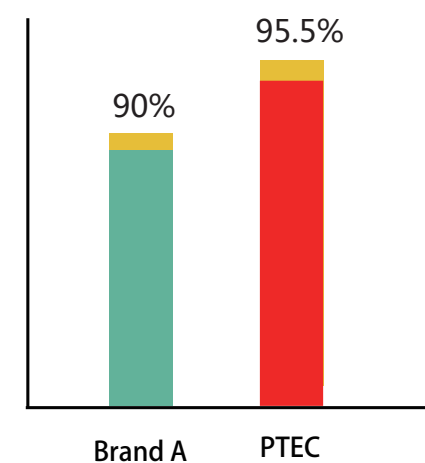


Faster maintenance

The long back up model and the standard model use the same PCBA. It is very simple to connect and easy to maintain, so greatly improve the speed and reliability of maintenance, and users can adjust the required parameters through the LCD.

Save power

At present, the efficiency of some brands in the market is generally between 80% ~ 93%. Take our PTEC 3KVA and 6KVA as a sample, compared with the model which the efficiency is 90% in the market.



Saving fee per year for 3KVA
 $(0.955-0.9) \times 3000W \times 24 \text{ hours} \times 365 \text{ day}$
 $\approx 1445Kwh$

Saving fee per year for 6KVA
 $(0.955-0.9) \times 6000W \times 24 \text{ hours} \times 365 \text{ day}$
 $\approx 2900Kwh$

SPECIFICATION 1-10KVA

Model	PT-1K	PT-1KL	PT-2K	PT-2KL	PT-3K	PT-3KL	PT-6K	PT-6KL	PT-10K	PT-10KL	
Rated Capacity	1KVA /1000W		2 KVA /2000W		3 KVA /3000W		6 KVA /6000W		10 KVA /10000W		
INPUT											
Input Formats	L+N+PE										
Rated Input Voltage	208/220/230/240VAC										
Voltage Range	110~300VAC (110~176VAC,280~300VAC power limited)										
Frequency Range	50/60Hz±6Hz,± 10Hz (setable)										
Input Power Factor	≥ 0.99										
Input Harmonic Distortion	≤3% THD(linear load), ≤5% THD(non-linear load) PF=0.8					≤5% THD(linear load), ≤8% THD(non-linear load) PF=0.8					
OUTPUT											
Output Formats	L+N+PE										
Output Voltage	208/220/230/240VAC										
Output Accuracy	±1%										
Output Frequency	AC mode: same as AC ,Battery mode:50/60Hz±1%										
Output Harmonic Distortion	≤1% THD(linear load), ≤3% THD(non-linear load) PF=0.8					≤2% THD(linear load), ≤5% THD(non-linear load) PF=0.8					
Output Power Factor	1.0										
Transform Time	AC mode to Batt. Mode:0ms,Inverter mode to Bypass mode:4ms										
Load Capacity	AC Mode: 30min@102%~110% Load 10min@110%~130% Load 30s@130%~150% Load 200ms@>150% Load			Battery Mode: 1min@102%~110% Load 10s@110%~130% Load 3s@130%~150% Load 200ms@>150% Load			AC Mode: 10min@102%~110% Load 1min@110%~130% Load 30s@130%~150% Load 500ms@>150% Load			Battery Mode: 10min@102%~110% Load 1min@110%~130% Load 10s@130%~150% Load 500ms@>150% Load	
Machine Efficiency											
AC Mode	Full load efficiency 94.5%@220VAC			Full load efficiency 95.5%@220VAC			Full load efficiency 95.5%@220VAC			Maximum efficiency 95.5%,Full load efficiency 95%	
Battery Mode	Full load efficiency 89.5%@36VDC			Full load efficiency 91.5%@72VDC			Full load efficiency 91.5%@96VDC			Maximum efficiency 95.3%,Full load efficiency 94.8%(20pcs battery)	
Battery Mode	Full load efficiency 89.5%@24VDC			Full load efficiency 91.5%@48VDC			Full load efficiency 91.5%@72VDC				
BATTERY											
Battery Quantity	7Ah x 2	36V	7Ah x 4/7Ah x 6	72V	7Ah x 6/7Ah x 8	96V	7Ah x 20	16~20PCS	7Ah x 20	16~20PCS	
Backup Time	Depend on user's requirement and configuration										
Charge Current	PT1K-3K : 1.0A(default) ,1-2A(adjustable) External battery back;					PT1KL-3KL : 5.0A(default) ,1-12A(adjustable) .					
	PT6K-10K : 5.0A(default) ,1-12A(adjustable) External battery back;					PT6KL-10KL : 5.0A(default) ,1-12A(adjustable)					
WORKING ENVIRONMENT											
Ambient Temperature	0~40°C										
Ambient Humidity	20%~95% (No Condensation)										
Storage Temperature	-15~60°C(Battery:0~40°C)										
Altitude	<1000m,Derating at above 1000m,maximum 4000m,Refer to IEC62040										
DISPLAY											
LCD	Working mode/load/battery power/input/output ect.										
STANDARD & CERTIFICATION											
Standard & Certification:	EN/IEC 61000,EN/IEC 62040,GB/T4943,YD/T 1095,TLC etc.										
PHYSICAL											
case size(L*W*H)	285*144*225		395*144*225		410*190*325	395*144*225	460*200*720	460*200*360	460*200*720	460*200*360	
Weight(KG)	17.5 (2pcs)	10 (2pcs)	32 (48V, 2pcs)/ 24 (72V, 1pc)	17 (48V, 2pcs)	24.2(72V)/ 28.2 (96V), 1pc	17 (2pcs)	61 (16pcs battery)/ 69.5 (20pcs battery)	14	61.5 (16pcs battery)/ 70 (20pcs battery)	14.8	
Carton size(L*W*H)	485*380*350		494*485*350 (48V)/ 610*330*480 (72V)		610*330*480	494*485*350	605*300*989	585*300*520	605*300*989	585*300*520	
COMMUNICATION INTERFACE											
INTERFACE	1*USB,1*RS232,1*EPO										

*Product specifications are subject to change without notice.