



Santak PT3000

1-20kVA



Santak PT3000 1-20kVA

Santak PT3000 series UPS is a new generation UPS providing professional uninterruptible power supply to critical equipment. PT3000 series UPS use the newest electronic components and topology to enhance UPS efficiency, saving customers' power cost. It also provides full of optional accessories and intelligent management solution for different application.



Feature

Low loss and high power density

The output power factor of the whole series is 1. The efficiency in double conversion mode of 20kVA is up to 96%. The height of rack installation is only 3U, and the depth is less than 600mm.

Programmable output socket

PT3000 series UPS provides one group programmable output socket. Customer can configure the output socket turn on and turn off delay time. With this function, customer can turn on and shutdown different loads in sequence. Shutdown the non-critical load in battery mode to extend the UPS backup time for critical load.

Strong environmental adaptability

PT3000 series UPS adopts active power factor correction

technology, which decrease the harmonic pollution to the power grid. The circuit boards are coating for dust-proof and anti-corrosion to adapt the harsher environment. 50°C high operation temperature. A variety of input and output configuration, the 20KVA UPS input and output phase can be adjusted to 1:1/1:3/3:1/3:3 according to the actual situation on site. Suitable for rack and tower installation.

Friendly human machine interface

Doc matrix LCD show more information of UPS parameters and status. Stand offer input and output dry contact terminal, EPO terminal, USB, RS232 and intelligent card slot.

Intelligent management

Santak intelligent power management software can monitor and manage multiple UPS. The software is compatible with mainstream virtualization operating systems, such as VMware, Microsoft HyperV/SCVMM. Perform the automatic shutdown of the physical host and the automatic migration of a virtualized cluster when the configured condition is triggered.



Communication accessory (optional)



Network-M2



INDGW-M2



CMC-G2



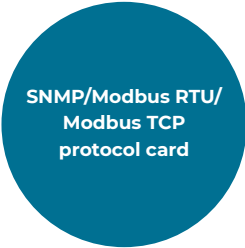
Relay-MS



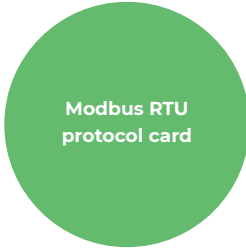
EMPDTH1C2



SNMP protocol card



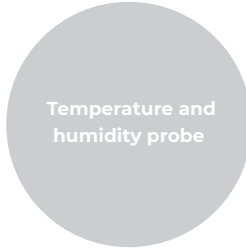
SNMP/Modbus RTU/
Modbus TCP
protocol card



Modbus RTU
protocol card



RS232 & Relay dry
contact card



Temperature and
humidity probe

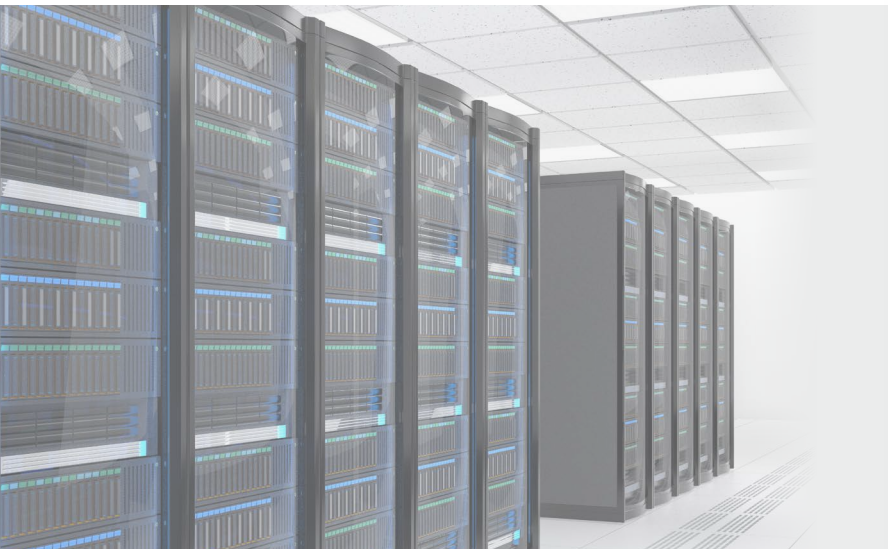
Maintain bypass accessory (optional)



MBP for PT6K (S) / PT10K (S) / PT10KS31

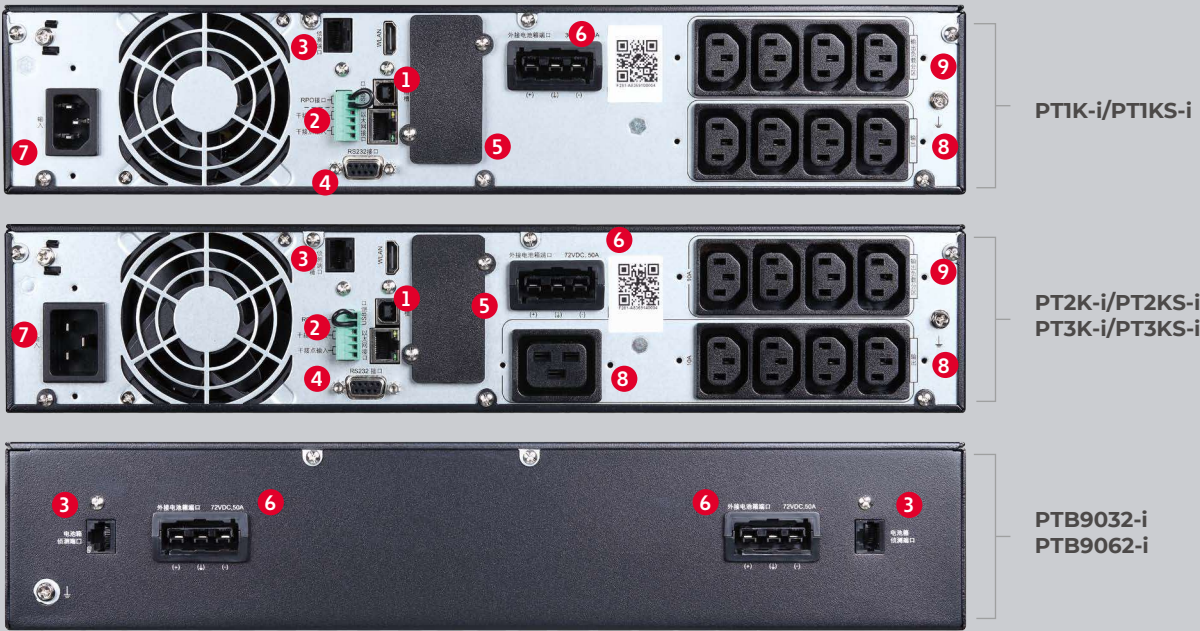


MBP for PT15KS / PT20KS



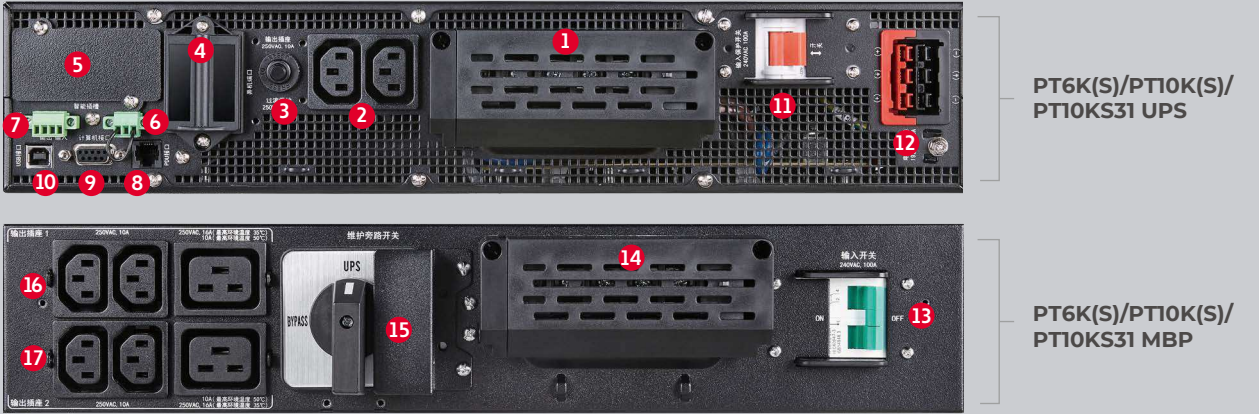
Rear panel description

1~3kVA



- | | | |
|--------------------------|-----------------|------------------------------|
| ① USB | ④ RS232 | ⑦ Input Socket |
| ② RPO / Dry in / Dry out | ⑤ Slot Card Box | ⑧ Output Socket |
| ③ EBM auto detect | ⑥ EBM Connector | ⑨ Programmable Output Socket |

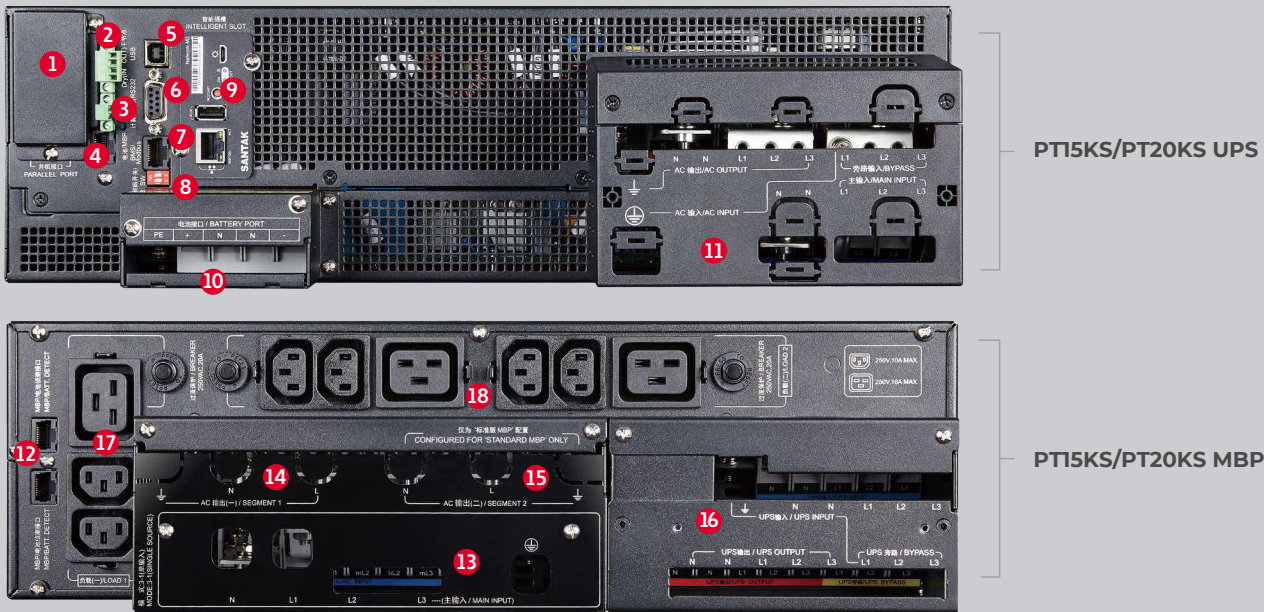
6~10kVA



- | | | | |
|--------------------------------------|----------------------------|--------------------------------|--------------------------------|
| ① Input/output wiring terminal | ⑥ EPO | ⑪ Input breaker | ⑯ Programmable output socket 1 |
| ② IEC C13 output | ⑦ Programmable dry contact | ⑫ Battery terminal | ⑰ Programmable output socket 2 |
| ③ Re-settable output circuit breaker | ⑧ MBP detection port | ⑬ Input switch | |
| ④ Parallel connection port | ⑨ RS232 | ⑭ Input/output wiring terminal | |
| ⑤ Slot card box | ⑩ USB | ⑮ Maintain bypass switch | |

Rear panel description

15~20kVA



- ① Parallel connection port

② Programmable dry contact

③ EPO

④ EBM/MBP detection port

⑤ USB
- ⑥ RS232

⑦ Modbus port

⑧ Modbus address switch

⑨ Slot card box

⑩ Battery terminal
- ⑪ Input/output wiring terminal

⑫ MBP detection port

⑬ Input wiring terminal

⑭ Output wiring terminal
- ⑮ Programmable output wiring terminal

⑯ Input/output wiring terminal

⑰ Output socket

⑱ Programmable output socket

Reference backup time

UPS Model	PT 1K-i	PT 2K-i	PT 3K-i	PT 6K (S)	PT 10K (S31)	PT 15KS	PT 20KS
EBM model	PTB9036-1	PTB9062-1	PTB9062-1	PTB7161	PTB9161	PTB9321	
Battery voltage	36VDC	72VDC	72VDC	192VDC	192VDC	384VDC	
EBM detect port	RJ11	RJ11	RJ11	-	-	RJ45	
W x H x D (mm)	438*85.5*445	438*85.5*600	438*85.5*600	438*129*589	438*129*589	438*129*589*2	
Net weight (Kg)	26.6	39.9	39.9	46.3	51.8	51.8*2	
Back up time (mins)							
Internal battery full load / half load	4/11	4/12	3/9	-	-	-	-
EBM*1 full load / half load	24/57	23/55	16/38	4/10	2.4/6	2.8/9.8	1.8/6
EBM*2 full load / half load	48/112	48/110	31/72	9/25	6/17	9.8/25	6/18.5
EBM*3 full load / half load	76/169	75/170	47/105	18/47	11/30	19/49	12/31
EBM*4 full load / half load	104/229	105/235	65/149	27/73	17/46	25/75	18.5/49

Technical Data

1-3kVA

Model	PT1K-i	PT1KS-i	PT2K-i	PT2KS-i	PT3K-i	PT3KS-i
Output						
Power rating	1kVA/1kW		2kVA/2kW		3kVA/3kW	
Power factor (PF)	1					
Output voltage	220V default (200/208/220/230/240 VAC optinal)					
Output voltage regulation	± 1 %					
Output frequency	50Hz/60Hz					
THDV	<1%					
Crest factor	3:1					
Efficiency @ Online mode	up to 91%		up to 93%		up to 93%	
Efficiency @ ECO mode	up to 96%		up to 97%		up to 97%	
Overload	125%, 10mins					
Input						
Input voltage range	110~300VAC (<160VAC need derating)					
Input frequency range	45 Hz – 55 Hz (50Hz) / 54 Hz – 66 Hz (60Hz)					
Power factor (PF)	≥ 0.99					
THDi	<5%					
Battery						
battery voltage	36VDC		72VDC		72VDC	
Internal battery (Ah*Qty)	7Ah*3	No	7Ah*6	No	9Ah*6	No
Charge current	1.5A	4A default (2/6/8A optional)	1.5A	4A default (2/6/8A optional)	1.5A	4A default (2/6/8A optional)
Charge temperature compensation	Yes					
EBM model	PTB9032-i		PTB9062-i			
EBM battery (Ah*Qty)	9Ah*6		9Ah*12			
Input & output connection						
Inlet	IEC C14		IEC C20			
Output socket	Main output: 4*IEC C13 Programmable output: 4*IEC C13		Main output: 1*IEC C19 + 4*IEC C13 Programmable output: 4*IEC C13			
Communication & interface						
Interface	LCD					
Communication	USB / RS232 / EPO / Slot card / dry contact					
Physical parameters						
Installation type	Rack/tower					
UPS W*D*H (rack type)	438*445*85.5mm(2U)		438*600*85.5mm(2U)			
UPS net weight	14.3kg	8.0kg	23.3kg	10.6kg	26.2kg	11.0kg
EBM W*D*H (rack type)	438*445*85.5mm(2U)		438*600*85.5mm(2U)			
EBM net weight	22.6kg		39.9kg			
Environment						
Temperature	0 °C ~ 50 °C (>40 °C derating)					
Humidity	0 ~ 95%					
Altitude	0~3000m (>1000m derating)					
Protection Class	IP20					
Standard	IEC 62040					

Technical Data

6-10kVA

Model	PT6K	PT6KS	PT10K	PT10KS
Output				
Power rating	6kVA		10kVA	
Power factor (PF)	1			
Output voltage	220V/230V/240V			
Output wiring	Single phase with ground			
Output voltage regulation	± 1 %			
Output frequency	(50/60±0.1) Hz			
THDV	≤1%			
Crest factor	3:1			
Efficiency @ Online mode	up to 95%			
Efficiency @ ECO mode	up to 98%			
Overload	125%, 10mins			
Input				
Input wiring	Single phase with ground			
Input voltage range	110VAC-275VAC			
Input frequency range	40~70Hz			
Power factor (PF)	>0.99			
THDi	<3%			
Battery				
battery voltage	192VDC default (192V~240V adjustable)			
Charge current	1.4A default (0-4A adjustable)	4A default (2-12A adjustable)	2A default (0-4A adjustable)	4A default (2-12A adjustable)
Charge temperature compensation	Yes			
EBM model	PTB7161		PTB9161	
EBM battery (Ah*Qty)	7Ah*16		9Ah*16	
Communication & interface				
Interface	LCD			
Communication	USB / RS232 / EPO / Slot card / dry contact			
Physical parameters				
Installation type	Rack/tower			
UPS W*D*H (rack type)	438*573*86.3mm			
UPS net weight	14kg	14.4kg	15.9kg	16.3kg
EBM W*D*H (rack type)	438*594*130mm			
EBM net weight	43.2kg		50kg	
Environment				
Temperature	0 °C ~ 50 °C (>40 °C derating)			
Humidity	0 ~ 95%			
Altitude	0~3000m (>1000m derating)			
Protection Class	IP20			
Standard	IEC 62040			

Technical Data

10-20kVA

Model	PT 10KS31	PT15KS	PT20KS
Output			
Power rating	10kVA	15kVA	20kVA
Power factor (PF)	1		
Output voltage	Single phase 220V/230V/240V		Single phase 220V/230V/240V, Three phase 380V/400V/415V
Output wiring	Single phase 3 wire (L,N,G)	Single phase 3 wire (L,N,G) / Three phase 5 wire (L1/L2/L3/N/G)	
Output voltage regulation	± 1 %		
Output frequency	50/60±0.1 Hz		
THDV	≤1%		
Crest factor	3:1		
Efficiency @ Online mode	up to 95%	up to 96%	
Efficiency @ ECO mode	up to 98%	up to 99%	
Overload	125%, 10mins		
Input			
Input wiring	Single phase 3 wire (L,N,G) / Three phase 5 wire (L1/L2/L3/N/G)		
Input voltage range	Single phase 110VAC~275VAC Three phase 191VAC~476VAC	Single phase 100VAC~300VAC Three phase 173VAC~520VAC	
Input frequency range	40~70Hz		
Power factor (PF)	>0.99		
THDi	<3%		
Battery			
battery voltage	192VDC (192V~240V adjustable)	± 192VDC (±192V to ±240V adjustable)	
Charge current	4A default, 0-12A adjustable	2A default, 0-13A adjustable	
Charge temperature compensation	Yes		
EBM model	PTB9161	PTB9321	
EBM battery (Ah*Qty)	9Ah*16	9Ah*32	
Communication & interface			
Interface	Touch LCD, auto rotate according to install direction		
Communication	USB/RS232/EPO/Slot card/dry contact		
Physical parameters			
Installation type	Rack/Tower		
UPS W*D*H (rack type)	438*573*86.3mm	438*589*129mm	
UPS net weight	16.2kg	23.7kg	
EBM W*D*H (rack type)	438*594*130mm	438*559*129mm *2	
EBM net weight	50kg	51.8kg *2	
Environment			
Temperature	0 °C ~ 50 °C (>40 °C derating)		
Humidity	0 ~ 95%		
Altitude	0~3000m (>1000m derating)		
Protection Class	IP20		
Standard	IEC 62040		