











CASTLE Series
6K(S)/10K(S)/3C10KS

USER MANUAL

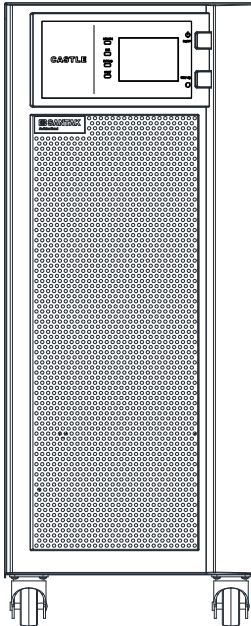
 **SANTAK**

1.1 Symbol and Explanation

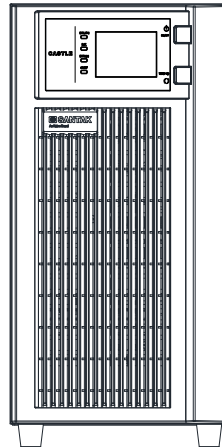
Some or all of the following symbols may be used in this manual. It is advisable to familiarize yourself with them and understand their meaning:

Symbol and Explanation			
Symbol	Explanation	Symbol	Explanation
	Alert you to pay special attention		Alternating current source (AC)
	Caution of high voltage		Direct current source (DC)
	Turn on the UPS		Protective ground
	Turn off the UPS		Recycle
	Idle or shut down the UPS		Do not dispose with ordinary trash

1.2 Front view

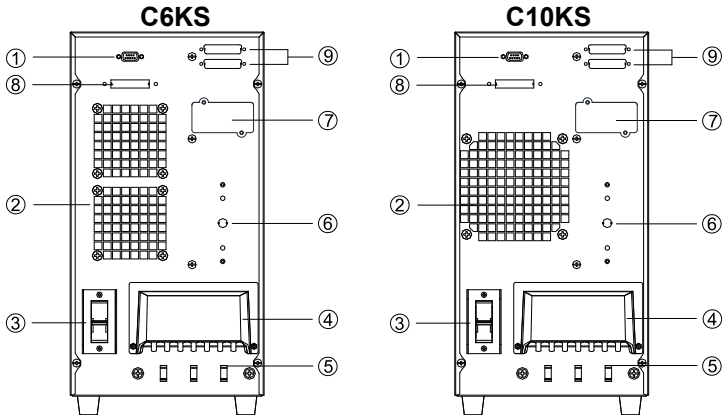
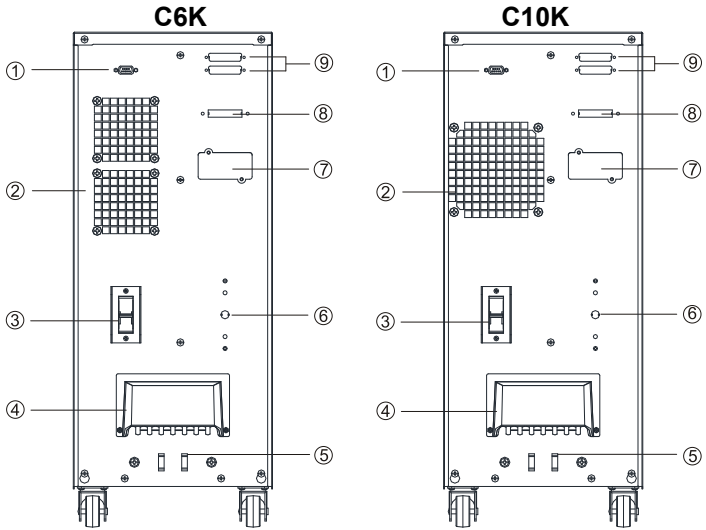


C6K/C10K



C6KS/C10KS/3C10KS

1.3 Rear View




1.4 product specification

Model	C6K	C6KS	C10K	C10KS	3C10KS
Dimensions W*D*H(mm)	248 x 500 x616	212 x500 x420	248 x500 x616	212 x500 x420	212 x500 x420
Weight(kg)	58.9	14.2	62.1	15.9	16.9
Power					
Apparent Power (KVA) / Active power (KW)	6KVA/ 5.4KW	6KVA/ 5.4KW	10KVA/ 9KW	10KVA/ 9KW	10KVA/ 9KW
Mains					
Voltage range	120Vac-275Vac(phase to phase)				
Current*	32.1A max	36.1A max	52.6 A max	56.6 A max	56.6 A max
Frequency range	40Hz-70Hz				
Power factor	0.99				0.95
Output					
Rating Voltage	220Vac($\pm 1\%$)				
Rating Current	27A		45A		
Frequency range	50Hz x ($1 \pm 1\%$); Follow main power in phase lock range				
Power factor	0.9				
Output Overload	105%-125%, load transfer to bypass mode after 10 min (0-30°C) or 1min(30°C-40); 125%-150%,load transfer to bypass mode after 30s; Over 150%, load transfer to bypass after 0.5s				
Load crest ratio	3:1(max)				
THD	<2%(100% Line load)				
Battery(under high temperature, battery life will decrease)					
Backup Time	4 min Full Load	Depend on external battery capacity	3 min Full Load	Depend on external battery capacity	
Charge Time	7 Hours to 90%	Depend on external battery capacity	7 Hours to 90%	Depend on external battery capacity	
EMC Standard	EN62040-2:2005/GB7260-2:2009				
Safety Standard	EN62040-1:2008+A1:2013				
YD Standard	YD/T1095-2008/CQC3108-2011				
Operation temperature	0-40°C				
Store temperature	-25°C to 55°C				
Relative humidity	20% to 90%				
Altitude	<1000m				

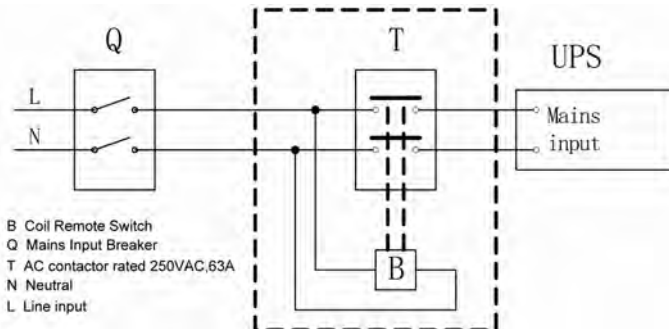
For 3 phase input UPS, “L” means L1/L3/L3 and they are the same cable width.

Model		C6K	C6KS	C10K	C10KS	3C10KS
Input	G	6mm ²	6mm ²	10mm ²	10mm ²	10mm ²
	N	6mm ²	6mm ²	10mm ²	10mm ²	10mm ²
	L	6mm ²	6mm ²	10mm ²	10mm ²	10mm ²
Battery	+	6mm ²	6mm ²	10mm ²	10mm ²	10mm ²
	-	6mm ²	6mm ²	10mm ²	10mm ²	10mm ²
	G	6mm ²	6mm ²	10mm ²	10mm ²	10mm ²
Output	L	6mm ²	6mm ²	10mm ²	10mm ²	10mm ²
	N	6mm ²	6mm ²	10mm ²	10mm ²	10mm ²
	G	6mm ²	6mm ²	10mm ²	10mm ²	10mm ²

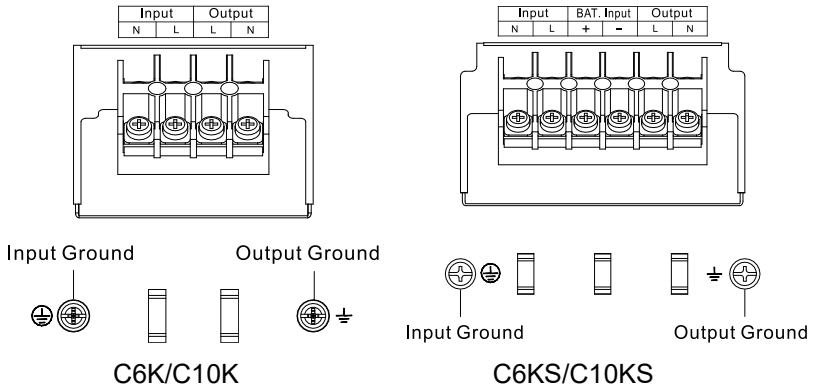
2.3 UPS Power Connection

 **DANGER:** In order to avoid the Mains power switch current overload when UPS carries with rating load, the Mains power switch rating current must be more than the bypass switch rating current. (bypass mode max current refer to 1.4 product specification)

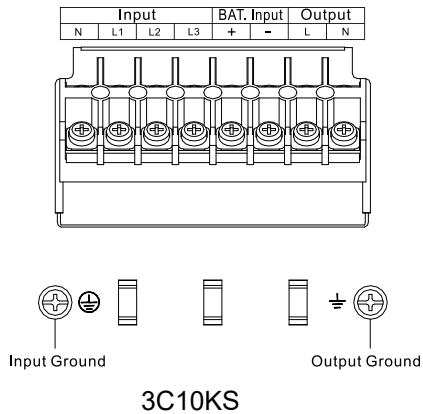
It is suggested to install an external isolating device against current backfeed between Mains input and UPS (see Fig.). After the device is installed, it must add a warning label with the following wording or the equivalent on the external AC contactor : RISK OF VOLTAGE BACKFEED. Isolate the UPS before operating on this circuit, then check for hazardous voltage between all terminals.



Single Phase Terminals:



Three Phase Terminals:



7. Make the straps through across the Beam frame.
8. Adjust the straps to proper position; Fix the input cable, output cable, EBM cable tightly.
9. Re-screw the terminal cover.

2. Select proper power cable(refer 2.2 power cable table) connect EBM and UPS. Make sure install a DC breaker(eg.EATON LZMN1-A160) between UPS and EBM connection. The minimum rating voltage and rating current of DC breaker not less than below table.

UPS Type	C6KS	C10KS	3C10KS
Battery voltage	192Vdc	192Vdc	192Vdc
Battery current	36.5A. Max	60.5A. Max	60.5A. Max

⚠ DANGER: In order to avoid hazards shock, do not connect EBM to UPS Before finish EBM connecting.

3. Connect EBM to UPS, after finish connecting between EBM and UPS, UPS output does not carry with any load, then turn on EBM switch to On position, and turn on mains power switch, UPS begins to charge EBM at the time.

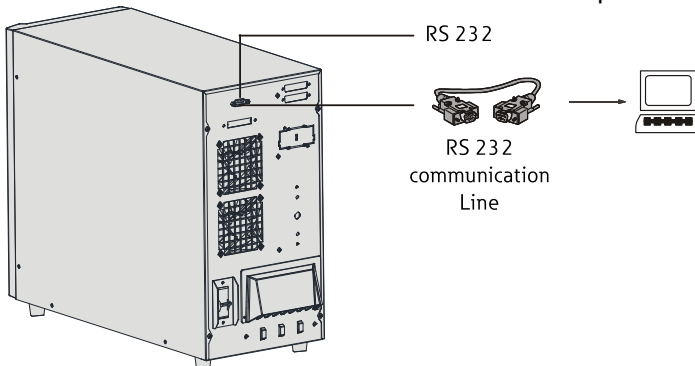
⚠ Note: Verify the battery connect to UPS with the correct polarity.

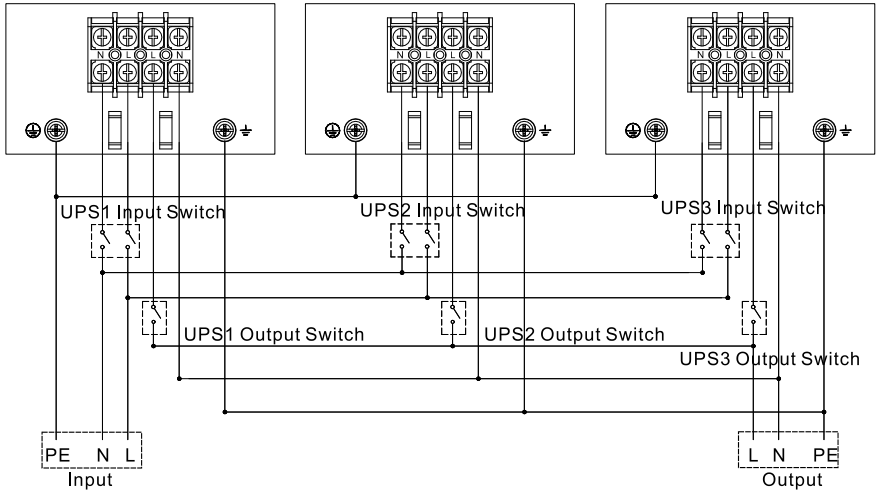
2.5 UPS Connect To Computer Port

RS232 interface is for the monitoring software and firmware update.

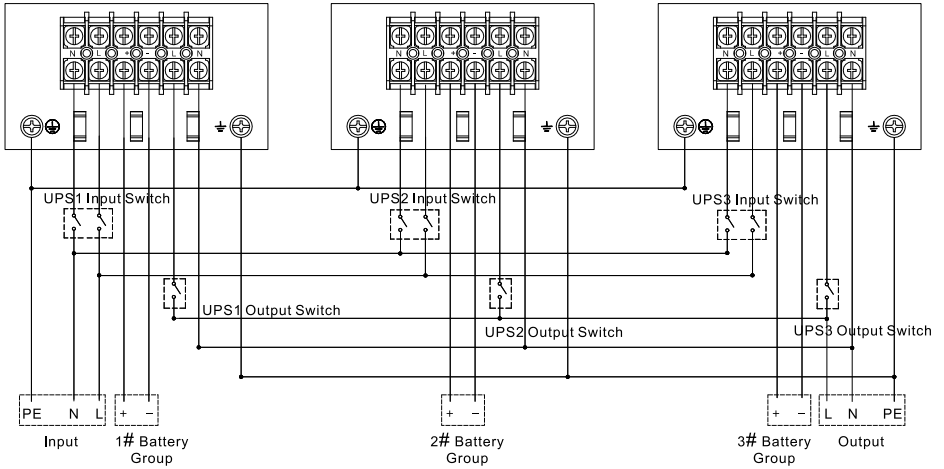
UPS connect to monitor device with RS232 cable.

1. One end of RS232 cable connects to computer RS232 port.
2. One end of RS232 cable connects to UPS RS232 port.





C6K/C10K



C6KS/C10KS