
	<b>PRODUCT SPECIFICATIONS</b>	REF. No. : B-WR1-235-217A
	PRODUCT SERIES : Santak Castle Series	Page No.
	MODEL : C10KS-LCD	1 OF 4

## **INPUT**

Nominal Voltage	: 220VAC
Phase	: Single phase with ground (2W + G)
Power Factor	: $\geq 0.99$
Voltage Range	: 120 ~ 275VAC
Volt. Low Detection / Comeback	: 120VAC / 140VAC, at load $\leq 50\%$ ; 150VAC / 165VAC, at $50\% < \text{load} \leq 70\%$ ; 165VAC / 180VAC, at $70\% < \text{load} \leq 90\%$ ; 185VAC / 200VAC, at load $> 90\%$ ;
Volt. High Detection / Comeback	: 275VAC / 260VAC
Nominal Frequency	: 50/60Hz
Frequency Range	: 40 ~ 70Hz
Freq. Low Detection / Comeback	: 40Hz / 40.5Hz
Freq. High Detection / Comeback	: 70Hz / 69.5Hz
THDi	: $< 3\%$ (With R full load at Line normal)
Nominal RMS Current	: 44A
Protection	: 63Amp Breaker
Connection	: Terminal Block


## **BYPASS**

Output before UPS power-on	: Default "YES", can be configured to "NO" through Winpower software
Voltage Range	: 187 ~ 264VAC
Bypass Low Detection	: Default 187VAC, can be set to 176 ~ 209VAC through Winpower software
Bypass Low comeback	: Bypass Low voltage detected plus 10VAC
Bypass High detection	: Default 264VAC, can be set to 231 ~ 264VAC through Winpower software
Bypass High comeback	: Bypass High voltage detected minus 10VAC
Protection	: 63Amp Breaker

	<b>PRODUCT SPECIFICATIONS</b>	REF. No. : B-WR1-235-217A
	PRODUCT SERIES : Santak Castle Series	Page No.
	MODEL : C10KS-LCD	2 OF 4

## OUTPUT

Power Capacity	: 10kVA / 9kW
Power Factor	: 0.9
Voltage	: 220/230/240VAC
Voltage Regulation	: $\pm 1\%$
Waveform	: Sine wave
Voltage Distortion	: $\leq 2\%$ (Full linear load) $\leq 4\%$ (Full RCD load)
Frequency	: Battery mode: 50/60Hz $\pm 0.05$ Hz Line mode: Synchronized to 50/60Hz $\pm 4$ Hz
Slew Rate	: $< 1.0$ Hz/sec
Phase Lock Error to Line	: $< 2^\circ$
Transient Recovery	: 60ms (R load from 0% to 100% and vice versa)
Current Crest Ratio	: 3:1
Efficiency	: Up to 90% at battery mode Up to 93% at line mode Up to 97% at ECO mode
Overload Capability	: 105% $<$ Load $\leq$ 125%, transfer to bypass mode after 10 min (0°C ~ $< 30^\circ\text{C}$ ) or 1 min (30°C ~ 40°C) Bypass over load $>$ 30 minutes then turn off output;  125% $<$ Load $\leq$ 150%, transfer to bypass mode after 30s Bypass over load $>$ 1 minutes then turn off output;  Over 150%, transfer to bypass after 0.5s Bypass over load $>$ 30 seconds then turn off output;
Nominal Output Current	: 45A
Short Circuit Protection	: Cut off output within 100ms in Line mode & Battery mode; Input Breaker in Bypass mode
Bypass Output without turning on	: Yes
Maintenance Bypass Switch	: Option
Connection	: Terminal Block


	<b>PRODUCT SPECIFICATIONS</b>	REF. No. : B-WR1-235-217A
	PRODUCT SERIES : Santak Castle Series	Page No.
	MODEL : C10KS-LCD	3 OF 4

### **BATTERY AND CHARGER**

Type	: Sealed, Maintenance Free, Lead-Acid
Rating	: Option
Quantity	: 16 pieces
Nominal DC Voltage	: 192VDC
Backup Time	: Depends on the external battery capacity
Auto Shutdown Voltage	: 176VDC $\pm$ 2VDC when load < 1kW 152VDC $\pm$ 2VDC when load > 1kW
Protection	: Fast-acting Fuse
Floating Charging Voltage	: 216VDC $\pm$ 1%
Initial Charging Current	: 4A
Recharge Time	: Depends on the external battery capacity
Over Voltage Protection	: 235.2VDC $\pm$ 1%
Leakage Current	: < 3.5mA
Connection	: Terminal Block

### **INTERFACE**

Control Panel	: Power On/Off, Self-test/Alarm silence
Indicators	: Graphical LED & LCD display: Line, Battery, Bypass, Inverter, Load level/Battery level, Fault
Diagnostics	: Full system self test on power up
Auto Restart Function	: Auto restart while AC source restored after discharge shutdown
DC Power-on Function	: On-battery power on
Audible Alarm	: Battery mode: Beeps every four seconds Battery low: Beeps every second Overload: Beeps twice every second Bypass: Beeps every two minutes Fault: Beeps continuously
Communications	
- DB-9 Port	: RS232 interface
- Intelligent Slot (SNMP)	: Available (Options : NMC, AS400 or CMC Card)
- Parallel Port	: Option
- Emergency Power Off(EPO)	: Option
Cooling	: Force air cooling

	<b>PRODUCT SPECIFICATIONS</b>	REF. No. : B-WR1-235-217A
	PRODUCT SERIES : Santak Castle Series	Page No.
	MODEL : C10KS-LCD	4 OF 4

### **PARALLEL FUNCTION**

Parallel card : Option  
Number of UPS in Parallel : Up to 3 units

### **TRANSFER TIME**

Utility Power Failure : 0 ms  
Bypass to Inverter and vice versa : < 4 ms  
0 ms option  
ECO to Inverter and vice versa : < 4 ms  
Auto Transfer : Automatically re-transfer to Inverter mode after overload is cleared

### **ENVIRONMENTAL**

Operating Temperature : 0 ~ 40°C  
Storage Temperature : -25°C ~ 55°C  
Humidity : 20% ~ 90%, Non-condensing  
Altitude : < 1000 m

### **STANDARD & SAFETY**

Audible Noise : ≤ 50dB, at 1-meter distance in front of the front panel  
(Exclusive of Buzzer)  
EMC : IEC61000  
IEC/EN62040-2  
Safety : IECEN62040-1

### **MECHANICAL FEATURES**

Unit  
Dimensions: W x D x H (mm) : 212 x 500 x 420 mm  
Weight (Kg) : 15.9 Kg  
Packaging  
Dimensions: W x D x H (mm) : 320 x 595 x 578 mm  
Weight (Kg) : 17.4 Kg

Specifications are subject to change without notice.