	<b>PRODUCT SPECIFICATIONS</b>	REF. No. : 614-01998XS1-01
	PRODUCT SERIES : Santak Castle Series MODEL : 3C10KS-LCD TECHNOLOGY : Online double conversion	: B-WR1-235-217A : EN-00006-01
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## **INPUT**

Nominal Voltage	: 380VAC/220VAC
Phase	: Three phase and Neutral with ground (4W + G) or Single phase with ground (2W + G)
Power Factor	: $\geq 0.99$
Voltage Range	: 208 ~ 476VAC/120~275VAC
Volt. Low Detection / Comeback	: 208/242VAC   120/140VAC, at load $\leq 50\%$ ; 260/286VAC   150/165VAC, at $50\% < \text{load} \leq 70\%$ ; 286/312VAC   165/180VAC, at $70\% < \text{load} \leq 90\%$ ; 304/329VAC   176/190VAC, at load $> 90\%$ ;
Volt. High Detection / Comeback	: 476/459VAC   275/265VAC
Nominal Frequency	: 50/60Hz
Frequency Range	: 40 ~ 70Hz
Freq. Low Detection / Comeback	: 40Hz / 40.5Hz
Freq. High Detection / Comeback	: 70Hz / 69.5Hz
Nominal RMS Current	: 16A
Protection	: 63Amp Breaker
Connection	: Terminal Block

## **BYPASS**


Output before UPS power-on	: YES
Voltage Range	: 187 ~ 264VAC
Bypass Low Detection	: Default 187VAC, can be set to 187 ~ 228VAC through Winpower software
Bypass Low comeback	: Bypass Low voltage detected plus 10VAC
Bypass High detection	: Default 264VAC, can be set to 210 ~ 264VAC through Winpower software
Bypass High comeback	: Bypass High voltage detected minus 10VAC
Protection	: 63Amp Breaker

Auto transfer to bypass mode When UPS is overloaded, failed, low battery ...

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## OUTPUT

Power Capacity	: 10kVA / 9kW
Power Factor	: 0.9
Phase	: Single phase with ground (2W + G)
Voltage	: 220VAC, can be set 230/240VAC
Voltage Regulation	: $\pm 1\%$
Waveform	: Pure Sine wave
Voltage Distortion	: $\leq 2\%$ (Full linear load) $\leq 4\%$ (Full non-linear load)
Frequency	: Battery mode: 50/60Hz $\pm 0.2$ 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 93.5% at battery mode Up to 93.5% at line mode Up to 98% at ECO mode
Overload Capability	: 105%-125%, load transfer to bypass mode after 10 min (0-30°C) or 1 minutes (30-40°C); 125%-150%, load transfer to bypass mode after 30s; Over 150%, load transfer to bypass after 0.5s;
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


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## **BATTERY AND CHARGER**

Type	: Valve Regulated Lead Acid (VRLA), Maintenance Free
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

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### **PARALLEL FUNCTION**

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

### **TRANSFER TIME**

Line mode <--> Battery mode : 0 ms  
 Bypass mode <--> Line mode : 0 ms  
 ECO mode to Line mode : < 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 : IEC/EN 61000  
           IEC/EN 62040-2  
 Safety : IEC/EN 62040-1

### **MECHANICAL FEATURES**

Unit  
 Dimensions: W x D x H (mm) : 212 x 500 x 420 mm  
 Weight (kg) : 16.9 kg  
 Packaging  
 Dimensions: W x D x H (mm) : 320 x 595 x 578 mm  
 Weight (kg) : 18.4 kg

Specifications are subject to change without notice.