

CASTLE SERIES ON-LINE UPS

# CASTLE UPS

1-3kVA

Power Management Expert



Manufactured by:



# Crucial moment, Powering your business

Santak UPS provide reliable protection for critical equipment and data

- Higher power density, more power output
- Wider input range, higher efficiency
- Ultra low noise, multiple configurable options
- High quality LCD with wide view



## Product Introduction

C1~3K(S) is the leading double conversion topology on-line UPS from Santak. It inherits the high quality standard of the previous Castle series generation and provides much stronger performance. It offers ideal solution for the major power quality problems such as grid power failure, under voltage, over voltage, sag, surge, line noise, frequency variation, switching transient, harmonic distortion efficiently, and provides a reliable power protection to the customer equipment.

Castle C1-3K(S) product provides high adaptability and flexible configuration, and it is applied with leading DSP control technology and offer multiple and extendable options to meet the increasing customized application demand.

## C1-3KVA mainly applied in

- IT and network equipment  
Small server or workstation  
Switches and monitoring system
- MOEM and automatic control system  
ATM, ticket machine  
Electricity and railway signal system  
SCADA system
- Office equipment  
computer, printer  
scanner, POS equipment

## Product performance

### Safe and reliable

- Best selling UPS and most widely installed on-line UPS, more than 30 years experience, perfectly match in multiple utility environment
- Professional digital control design technology, strong power semiconductors, Triple protection from hardware and firmware design, safer and more reliable

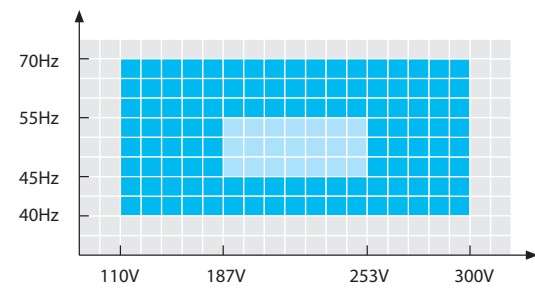
### Green power design, energy saving

- Output power factor up to 0.9, providing more power
- High efficiency design, save the operating cost, reduce the carbon emissions
- Green and environment protection design, meet all strict standards

### Easy use, Easy extension

- Easy battery configuration and can meet different backup time requirement
- Intelligent and real time battery monitoring
- Multiple options, support different applications

### ★ Wide input voltage and frequency range



■ Grid power variation range  
■ C1-3KVA wide input voltage and frequency range

### ★ comply with generator



- Wide**  
Input voltage range  
115-300VAC
- Adaptable to**  
Harsh environment
- Compatible with**  
Generator
- Ultra-low noise**  
<40 dB
- Configurable**  
Backup time

## Castle C1-3KVA is widely applied in different places



Harsh environment in high altitudes area

Remote area with poor grid power

Coastal area with high humidity and high temperature

Middle and big cities under power supply shortage pressure

C1-3KVA always provides safe and reliable protection to your equipment



## C1-3kVA UPS Product Specification

| Model              |                                | C1K                                                                               | C1KS                              | C2K           | C2KS                              | C3K                   | C3KS                                    |                                |
|--------------------|--------------------------------|-----------------------------------------------------------------------------------|-----------------------------------|---------------|-----------------------------------|-----------------------|-----------------------------------------|--------------------------------|
| Capacity           | VA/W                           | 1000VA/900W                                                                       |                                   | 2000VA/1800W  |                                   | 3000VA/2700W          |                                         |                                |
| Input              | Input Voltage Range            | 100 ~ 300 VAC                                                                     |                                   |               |                                   |                       |                                         |                                |
|                    | Frequency Range                | 40 Hz - 70 Hz                                                                     |                                   |               |                                   |                       |                                         |                                |
|                    | Input Wiring                   | Single phase with ground                                                          |                                   |               |                                   |                       |                                         |                                |
|                    | input power factor             | 0.99                                                                              |                                   |               |                                   |                       |                                         |                                |
| Output             | Output Power Factor            | 0.9                                                                               |                                   |               |                                   |                       |                                         |                                |
|                    | Nominal Output Voltage         | 220/230/240VAC                                                                    |                                   |               |                                   |                       |                                         |                                |
|                    | Voltage Regulation             | 1%                                                                                |                                   |               |                                   |                       |                                         |                                |
|                    | Frequency Range (Battery Mode) | 50 / 60 ±0.05Hz                                                                   |                                   |               |                                   |                       |                                         |                                |
|                    | Outlet                         |                                                                                   | 4*IEC 10A                         | 3*IEC 10A     | 4*IEC 10A                         | 6*IEC 10A             | 4*IEC 10A + 1*IEC 16A                   | 3*IEC 10A + 1*Terminal Blocker |
|                    |                                |                                                                                   | or 3*SCHUKO                       | or 2*SCHUKO   | or 4*SCHUKO                       | or 2*SCHUKO+1*IEC 10A | or 4*SCHUKO                             | or 2*SCHUKO+1*IEC 16A          |
|                    |                                |                                                                                   | or 4*(SCHUKO/NEMA)                | NA            | or 4*(SCHUKO/NEMA)                | NA                    | or 4*(SCHUKO/NEMA) + 1*Terminal Blocker | NA                             |
|                    | Current Crest Ratio            | 3:1                                                                               |                                   |               |                                   |                       |                                         |                                |
|                    | Voltage Distortion (THDv)      | < 1% @ linear load, < 5%@ non-linear load                                         |                                   |               |                                   |                       |                                         |                                |
|                    | Output Waveform                | Pure sine wave                                                                    |                                   |               |                                   |                       |                                         |                                |
| Parallel Operation | N/A                            |                                                                                   |                                   |               |                                   |                       |                                         |                                |
| Efficiency         | Inverter Mode                  | >89%                                                                              |                                   | >91%          |                                   | >91%                  |                                         |                                |
|                    | ECO Mode                       | >97%                                                                              |                                   |               |                                   |                       |                                         |                                |
| Battery            | Battery Type                   | 12V / 9Ah                                                                         | External batteries required       | 12V / 9Ah     | External batteries required       | 12V / 9Ah             | External batteries required             |                                |
|                    | Number of Internal Battery     | 2                                                                                 |                                   | 4             |                                   | 6                     |                                         |                                |
|                    | Rated Battery Voltage          | 24V                                                                               |                                   | 48V           |                                   | 72V                   |                                         |                                |
|                    | Backup Time (@ FullLoad)       | > 3.5 mins                                                                        | depends on customer configuration | > 3.5 mins    | depends on customer configuration | >3.5min               | depends on customer configuration       |                                |
|                    | Recharge Time (t o 90%)        | 4 hours                                                                           |                                   | 4 hours       |                                   | 4 hours               |                                         |                                |
|                    | Charging Current               | 1.5A                                                                              | 6A                                | 1.5A          | 6A                                | 1.5A                  | 6A                                      |                                |
| Transfer Time      | Battery Mode<-->InverterMode   | 0ms                                                                               |                                   |               |                                   |                       |                                         |                                |
|                    | Inverter Mode<-->BypassMode    | 4ms (typical)                                                                     |                                   |               |                                   |                       |                                         |                                |
| Display            |                                | load rating / battery capacity / input / output / operating mode                  |                                   |               |                                   |                       |                                         |                                |
| Dimension          | WxHxD                          | 144x228x356mm                                                                     | 102X228X346mm                     | 190x327x399mm | 102X327X390mm                     | 190x327x399mm         | 102X327X390mm                           |                                |
| Net Weight         |                                | 9.2 kg                                                                            | 3.9 kg                            | 17.4 kg       | 6.4 kg                            | 22.7 kg               | 6.4 kg                                  |                                |
| Environment        | Operating Temperature          | 0~40                                                                              |                                   |               |                                   |                       |                                         |                                |
|                    | Noise Level <sup>1</sup>       | <40dB@1 meter                                                                     |                                   |               |                                   |                       |                                         |                                |
| Interface          | RS232                          | IEC model: RS232; SCHUKO model and SCHUKO/NEMA adaptable model: USB+EPO, no RS232 |                                   |               |                                   |                       |                                         |                                |
|                    | Communication Slot             | Yes, comply optional cards NMC, CMC, AS400 card                                   |                                   |               |                                   |                       |                                         |                                |

**Note:**

1. Noise level may vary with equipment, configuration, temperature, etc.

\* All internal batteries are default as STK brand, any other battery brand might be applied without prior notice;

\* SCHUKO/NEMA adaptable outlet Model is not conformed with CE Standard;



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