



The seventh generation of Santak Castle series

CASTLE G7

Inheriting craftsmanship and striving for

excellence, the new generation of Castle series 1~3kVA



New generation Castle G7 1~3kVA

Product Introduction

The Castle series continues its 40-year design heritage, adhering to the design philosophy of "advanced technology, quality first." The new generation of Castle surpasses its predecessor, fully meeting users' needs for uninterrupted power while further enhancing performance, reliability, adaptability, user-friendliness, and flexible expansion.



Application Scenario

- Enterprise file servers, key workstations, etc.
- Distributed IT systems
- Business office equipment
- Home entertainment equipment
- Manufacturing process control system
- Supervisory control and data acquisition system
- Track communication system
- Embedded industry supporting





high performance

- 1.0 power factor, stronger load capacity
- Ultra-wide input range, 110Vac~300Vac
- Strong overload capacity, 125% overload for 10 minutes
- CQC energy-saving certification, Taier certification class 1 standard

Wide adaptation

- 40~70Hz wide frequency range, highly efficient generator adaptation
- Automatically identify grid frequency and automatically match output frequency
- CVCF constant voltage constant frequency mode, supports special voltage frequency equipment, adapts to high sensitivity

Sensing equipment

- The power-on delay time can be set to flexibly respond to power grid fluctuations and start at off-peak times to reduce power outages.

Less grid shock

- Smaller size, suitable for various installation environments

Smart Charging

- Long-lasting machine with maximum 8A charging and three-stage charging mode to increase charging speed
- Automatic temperature compensation for charging to prevent battery overcharging
- Support battery self-test settings and battery pack equalization settings to facilitate battery maintenance and management

Intelligent Management

- Support a variety of smart communication cards to meet various monitoring and management needs
- Remote monitoring and intelligent alarm push can be achieved through the "Santega" APP
- Multiple faults can be self-recovered to reduce human intervention
- Supports sleep mode, UPS can continue to communicate and receive remote

Program Instructions

More user-friendly experience

- New LCD screen, real-time monitoring, convenient operation, automatic screen off and wake-up,

Absolute light pollution

- Silent mode can be set to turn off the buzzer to reduce alarm sound interference
- Automatic fan speed adjustment, low speed mode meets the library's first-level silent standard

Optional accessories list

| Optional accessories | Material Number |
|---|-----------------|
| Smart card slot | 730-80405 |
| NMC card (network monitoring card) | 730-80349 |
| CMC card (Modbus monitoring card) | 730-80100 |
| EMP (temperature and humidity acquisition module) | 744-A2460 |
| AS400 card (dry contact card) | 730-80514 |
| SPCC_N (CloudLink Network Card) | 744-F0612 |
| WLANdongle (CloudLink Wifi Module) Rack Rails | 744-A4917 |
| Rack rail | 744-A4805 |
| Handle-type hanging ear | 744-A5571 |

Castle G7 Tower 1~3K Technical Specifications



| model | | C1K(G7) | C1KS(G7) | C2K (G7) | C2KS (G7) | C3K (G7) | C3KS(G7) |
|--------------------------|-----------------------------------|--|-----------------------------------|-----------|--|---|------------------------|
| Rated capacity | | 1KVA/1KW | | 2KVA/2KW | | 3KVA/3KW | |
| Input and output formats | | Single-phase input, single-phase output | | | | | |
| enter | Input format | L+N+PE | | | | | |
| | Rated voltage | 200Vac/208Vac/220Vac/230Vac/240Vac (default 220Vac) | | | | | |
| | Voltage range | 110Vac~300Vac | | | | | |
| | frequency | 40Hz~70Hz | | | | | |
| | Power Factor | ≥0.99 | | | | | |
| | Input harmonic distortion THDI | <5% @ non-linear full load | | | | | |
| | Bypass voltage | The default bypass mode is 187Vac~264Vac, and the default ECO mode is 198Vac~242Vac | | | | | |
| Output | Output format | L +N +PE | | | | | |
| | Rated voltage | Default 220Vac (200Vac/208Vac/220Vac/230Vac/240Vac can be set)① | | | | | |
| | Output frequency | 50Hz/60Hz adaptive | | | | | |
| | Output socket | 2*national standard socket (10A) | 4*national standard sockets (10A) | | 4*national standard socket (10A) + Terminal blocks | 3*National standard socket (10A) + terminal block | |
| | Efficiency @ mains mode | up to 90% | | up to 91% | | up to 93% | |
| | Power Factor | 1② | | | | | |
| | Voltage accuracy | ±1% | | | | | |
| | Output harmonic distortion THDV | < 1%@linear full load | | | | | |
| | Overload capacity@mains model | ≤105%, continuous operation and alarm 105% ~125%, switch to bypass and alarm after 10 minutes 125% ~150%, switch to bypass and alarm within 30 seconds >150% , 100 milliseconds to bypass and alarm | | | | | |
| | Conversion time | 0 milliseconds | | | | | |
| Battery | Battery voltage | 24Vdc | 36Vdc | 48Vdc | 72Vdc | 72Vdc | 96Vdc |
| | Internal battery capacity | 9AH | / | 9AH | / | 9AH | / |
| | Backup time (Standard machine) | >3 minutes @PF=1 full load, >4 minutes @PF=0.9 full load | | | | | |
| | Charging current | 1.5A | 6A | 1.5A | Default 4A, maximum 8A | 1.5A | Default 4A, maximum 8A |
| Human-Machine | show | LCD, three-color LED | | | | | |
| interface | communication | Standard RS232, optional smart card slot and NMC card, CMC card, AS400 card, SPCC card | | | | | |

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|---------------------------|---|---|-------------|-------------|-------------|-------------|-------------|
| environment | Operating temperature | 0-40℃ | | | | | |
| | Storage temperature | -25℃~ 55℃ (without battery) | | | | | |
| | relative humidity | 0%~95% RH (no condensation) | | | | | |
| | Altitude | ≤3000m (derating is required for altitudes >1000m) ③ | | | | | |
| | IP rating | IP20 | | | | | |
| Certification standard | Certification | Taier certification, CQC energy-saving certification | | | | | |
| | Industry Standards | YD/T 1095-2018,CQC3108-2011 | | | | | |
| | EMC standards | GB/T 7260.2:2009, IEC 62040-2:2016 Low-frequency conduction and harmonics: Class A; electrostatic discharge, conducted interference immunity, and radiated interference immunity: Level 3; transient pulse interference, surge, and power frequency magnetic field immunity: Level 4 | | | | | |
| size weight | Machine size (width*depth*height mm) | 144*347*229 | 102*349*229 | 190*391*297 | 102*392*298 | 190*391*297 | 102*392*298 |
| | Net weight (kg) | 9.4 | 4 | 17.4 | 5.4 | 23 | 5.6 |
| | Packing size (width*depth*height mm) | 241*433*343 | 196*429*332 | 330*493*438 | 196*493*432 | 330*493*438 | 196*493*432 |
| | Gross weight (kg) | 10.2 | 5 | 19.2 | 6.8 | 24.9 | 7 |

① When the output is set to 200Vac/208Vac, the power needs to be derated by 10%

②When the temperature is >30℃, the output power factor drops to 0.9

③ When using at altitudes > 3000m, please consult the Santak service hotline