3C3 PRO 20-200kVA Product Specification

Model		20KS	30KS	40KS	60KS	80KS	100KS	120KS	160KS	200KS
Power rating	kVA	20	30	40	60	80	100	120	160	200
	kW	18	27	36	54	72	90	108	144	180
Topology		Double conversion, IGBT based								
UPS rectifier/input										
Topology		PWM, IGBT based								
Rated voltage		380Vac/220Vac								
Voltage range		-50%-20%, depends on load percentage								
Input power factor		0.99								
THD (i)		<5%								
Rated frequency		50/60Hz auto sensing								
Frequency range		42-72 Hz								
UPS Output										
Power factor		0.9								
Efficiency		Up to 94% in online mode; >98% in ECO mode								
Output voltage		380Vac/220Vac +/-1%								
Overload capacity		<105% continuous run; 105%-125% 10min								
THDV		<2% for Linear load								
Output frequency		50/60Hz								
Unbalanced load		1								
Crest factor		3 : 1								
Bypass										
Internal static switch		Standard								
Bypass voltage		380Vac (+/-15%)								
Maintainence bypass		Standard					Optional		NA	
Battery										
Battery type		VRLA								
Backup time		Varies from battery capacity and load situation								
Battery PCS		28-36 PCS adjustable, 32PCS default					36-40 PCS adjustable, 40PCS default			
Recharge time		8 hour to 90%								
Communication										
Interface		RS232, Mini slot								
Accessories (optional)		SNMP/WEB, Modbus/Ethernet, AS400, NMC								
Opertion environment										
Running temperature		0~40°C								
Storage		-25~55°C								
Humidity		5%~95%								
Elevation		No derating < 1000m								
Certifications										
EMC		IEC61000-4								
EMI		EN5550022/EN55024								
Quality		ISO90001 : 2000, ISO14001 : 1996								
Certification		CE								

SANTAK ELECTRONICS (SHENZHEN) CO., LTD.

Shenzhen, P.R. China
Address: No. 8 Baoshi Road, Baoan District,
Shenzhen, 518101
Tel: 0086 755 27572666
Fax: 0086 755 27572730 (27572480)
Email: Santak_int@eaton.com

Website: www.santak.com

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SANTAK

SANTAK CASTLE SERIES ON-LINE UPS

CASTLE 3C3 PRO

20-200kVA
Power Management Expert

SANTAK

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

Typical Application

- Small, Medium Data Center
- Computer Room
- Telecom
- Automation Control System
- Security and Surveillance System
- CCTV System
- Production Process Control
- Petro Chemical Industry

Power Rating: 20/30/40/60/80/100/120/160/200kVA
Topology: Double conversion topology on-line UPS
High frequency IGBT
Tower design
Input & Output: 220V/380V 4-Wire
Frequency: 50/60 Hz
Key Feature:

- 0.9 output factor
- Parallel up to 4 units
- Intelligent battery performance management
- ECO mode
- Battery quantity adjustable
- Easy installation and maintenance

Compact-Size on Footprint

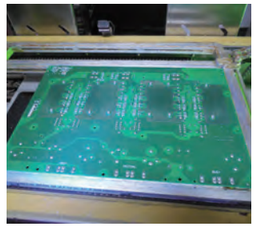
3C3 PRO MODEL	W (mm)	D (mm)	H (mm)	S (m²)
20KVA	420	715	900	0.30
30KVA				
40KVA				
60KVA	600	720	1200	0.43
80KVA				
100KVA	600	800	1876	0.48
120KVA				
160KVA	600	830	1876	0.50
200KVA				

Enhance Environmental Adaptability

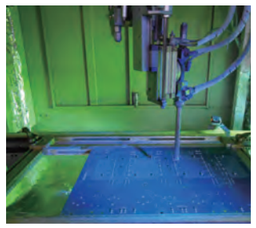
Anti-Corrosion Production

PCBA corrosion is one of the key reasons leading to UPS components failure, especially in coastal areas. SANTAK applies advanced PCBA coating technology, offering customers an excellent anti-corrosion performance.

- **Optimized Programming**
  According to the system design and air distribution, we directly program on the equipment to achieve on-demand spraying, meanwhile considering the possible salt spray and dust accumulation probability.
- **Automatic Coating Process**
  Automatic coating technology adopted, the coating precision and consistency is highly improved, comparing with manual coating technology.
- **Blue-ray Detection**
  Assisted with blue-ray detection technology, PCBA coating quality is significantly improved.



PCBA before Coating



PCBA after Coating

Dustproof Design

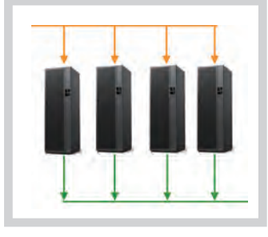
3C3 PRO offers standard air filter kits, which prevent the dust out of the UPS and improves the environmental adaptability. The filtration kit meets with

- Easy disassemble and clean, low maintenance cost;
- Flame resistant;

In additional, the internal design of 3C3 PRO optimizes the internal air flow distribution, which significantly decreases the dust deposition.

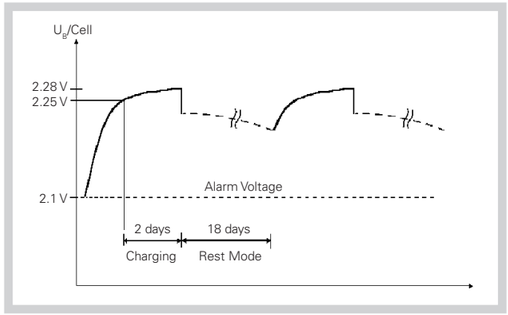
Leading Parallel Technology

3C3 PRO is embedded with internal parallel kits powering by high reliability CAN bus. With better output voltage regulation, perfect load sharing and active protection, 3C3 PRO assure the reliability and redundancy of the paralleling power system. 3C3 PRO offers more excellent performance in paralleling and improves the output accuracy.



SANTAK Intelligent Battery Management Technology

3C3 PRO adopts the advanced 3-stage charging technology. In the first stage, it charges the battery up to 90% capacity with high current. In the second stage, it charges the battery to 100% capacity with constant voltage. In the third stage, it stays in rest mode. The 3-stage charging method can extend the battery life cycle avoiding long-time floating charge issues. SANTAK intelligent battery management technology can accurately forecast battery working mode and remind your customers of potential malfunction.



3C3 PRO supports flexible battery quantity configuration. Customers possess flexibility to choose different battery capacity and quantity in the backup solution. Even in the on-run mode, the battery quantity configuration can be quickly adjusted to disassemble the malfunctioning battery, while the whole UPS system can guarantee a constant power supply.

STK CASTLE BATTERIES

——Maintenance-free Sealed Lead-acid UPS Batteries

CASTLE C12V series batteries are being designed with more focusing on compatibility with SANTAK UPS and system. Compare to other batteries in the market, CASTLE C12V series batteries can provide longer float charging life time and more powerful discharging characteristics. It is an ideal product for SANTAK UPS backup application.