



S3300 Series

UPS 60-200kW

- » 3 level IGBT rectifier and inverter
- » High Efficiency up to 96.5%
- » Output PF 1.0
- » High ambient temperature up to 50 °C
- » Fault Trace Management
- » Colorful LED bar



FINANCE



TELECOMMUNICATION



ENERGY



MEDICAL



GOVERNMENT

VFI
type

UPS ONLINE



TOWER

PF=
1,0

POWER FACTOR



SERVICE

S3300 The new transformer less UPS from SATRON Power Solutions

Best Class system for its compact footprint , the system also providemhigh efficiency >96.5% in double conversation and up to 98% in eco mode

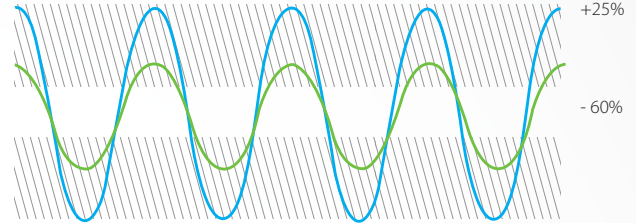
S3300 is flexible in its configuration and benefits of wide range of options.This make it and ideal power protection for small and medium sized critical applications where the power consumption, available space and reliability are key parameters

The combination of high-level performance, with integrated battery solutions, or (as an alternative), the inbuilt galvanic isolation, the compact footprint and the wide range of options, make **S3300** the best solution for the power quality of any critical load.



High Reliability

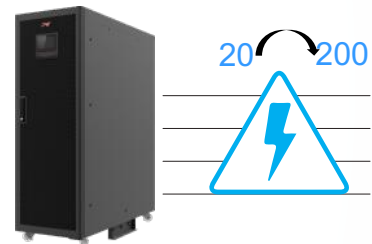
- **Wide input voltage** range -60% ~ 25% and **Wide input frequency** range 40-70Hz with high grid adaptability and prolong battery life.
- Separate internal air channel which hot air drives directly towards heat sink without distressing the PCB's and other internal sensitive components, improving the components service life and UPS reliability
- **High overload capacity** on inverter for 105% load long run and 130% load 10 mins and bypass 130% load long run.
- The most advanced and dual DSP control prevents single failure point and increase performance.
- Intelligent fan control and redundant design: 15% load can be driven when 2 fans fail and 40% load when 1 fan fails
- **Integrated with 4 breakers** input,output,bypass breaker and manual bypass switch for better protection of system.
- **All-round conformal coating** to all PCB boards, protect electronics from environmental effect and corrosion.
- **Standard dust filter** protect UPS placed in dusty environment.
- **Short circuit period time settable** from 20~200ms which provide high protection for system
- Cold start function which allow UPS start on battery when grid isn't available.
- Bus synchronization control function provides reliable high power for dual bus application
- **Power walk in** function decrease the inrush to mains or generator.
- Start up delay function, to sequentially restart the rectifiers once the mains power supply is restored if there are several UPS within the overall system
- No derating operate up to 40°C and continuously running under **high ambient temperature up to 50°C** with auto-derating.



Wide input voltage



Automatic fans control

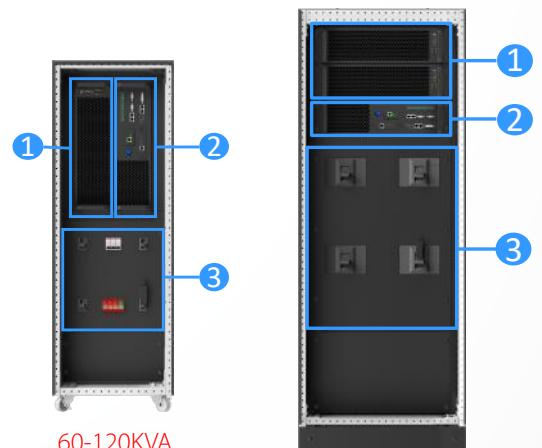


Short Circuit Time

1 Power unit

2 Bypass and control unit

3 Power distribution unit



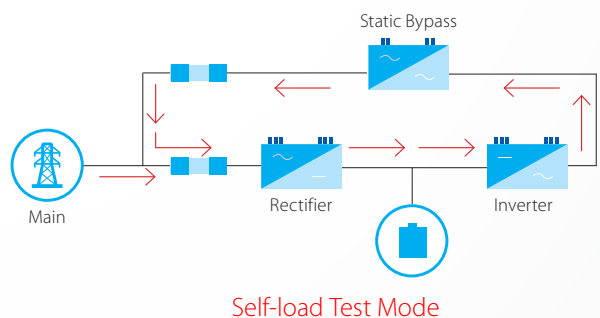
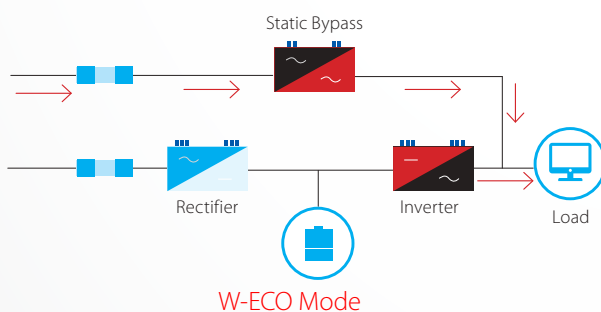
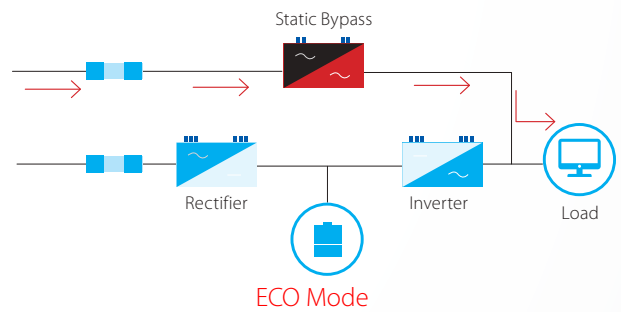
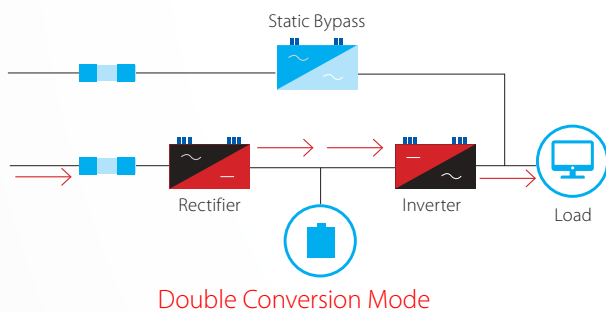
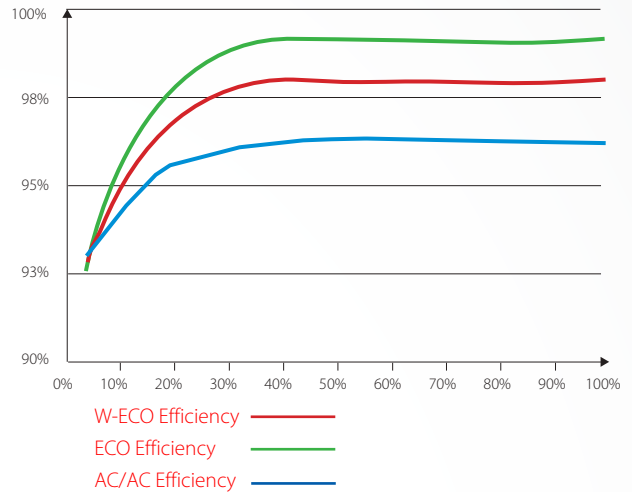
60-120KVA

160-200KVA



Green power

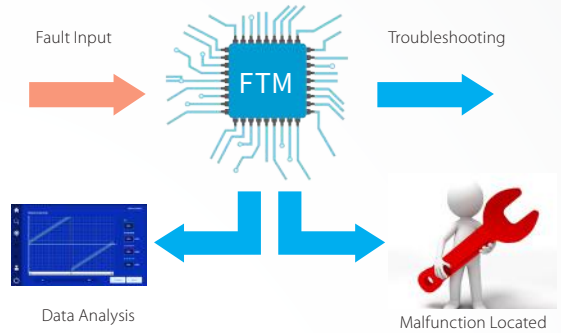
- **Latest generation IGBT and three level technology**, Low harmonic, high efficiency, effectively energy-saving.
- **High power density** design, which small footprint on 120KVA only 0.38m² for saving installation space.
- High input power factor up to 0.99 and low Input THDi: < 2.0% at full load, much less grid pollution and costs
- **AC/AC efficiency up to 96.5%** and 30% load up to 95% efficiency reduces heat dissipation and limits power consumption costs
- ECO mode efficiency up to 99.2% lead to significant cost reduction
- **W-ECO mode** could reach 98.5% efficiency, THDi below 5% and transfer time below 4ms to reduce TCO.
- Self-load test function, easy debugging and easy onsite test during commissioning, before it is connected the real load, without using costly temporary loads, cabling and breakers for energy saving.
- Parallel ECO mode maximum whole system efficiency.
- Intelligent sleep mode which UPS sleep in random keep maximum efficiency and energy saving.
- 8 units of intelligent paralleling helps to achieve maximum capacity up to 1.6MW.



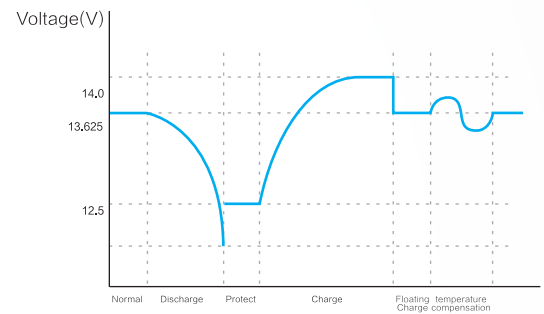


Intelligent Management

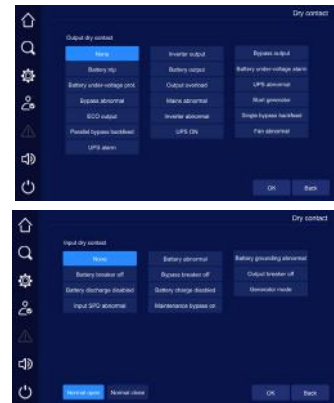
- Fault Trace Management (**FTM**) for convenient failure analysis(waveform record before & after of the fault point for 200ms) which easily figure out faulty point.
- 3 stage battery charging prolong the service life of batteries
- Intelligent battery management and mutiple setting, 28-48 pcs batteries per string allow customers to get the faulty battery out instead of replacing it
- Key components pre-alarm function which precaution the system fault and remind service for key components, like capacitor, fan.
- Full asset management record the spare parts replacement, timeline and service people.
- Cabinet temperature detect and pre-notification which prevent over temperature.
- **Smart programmable dry contact** which have 5 input dry contact and 3 output dry contact, which input dry contact have more than 10 functions and output dry contact have 18 functions allows to settable at site.
- Smart generator mode which allow UPS sent signal to turn on and off generator, also taking part power from battery to compensation generator capacity.
- Self-dedusting function which save the preventive service time.
- Common battery bank on parallel mode.
- Frequency converter function(60Hz to 50Hz or 50Hz to 60Hz)
- VRLA and Lithium battery compatible design



Fault tracing management



3 Stage Charging



Programmable Dry Contact



Common battery bank



Frequency Converter Mode



User-friendly Interface

- User-friendly double physical ON/OFF button design to avoid false operation.
- User-friendly graphical interface with Single-line mimic diagram showing system status.
- Colorful 4.3 inch and 7 inch **touch screen** with LED Indicators, ensure comprehensive and visualized information display.
- **Multicolor LED bar** allowing quick and easy detection of the system status and simplified troubleshooting.
- **Multi-language** build-in display with Chinese, English, French, Spanish, Italian, Polish, Russian, Korean.
- High security access with separate password levels for users, technician and service engineers
- Large data storage capacity, 10000 pcs events logs.
- Support firmware online update, one time update for touch screen, power unit, bypass unit and extended card.
- Main unit display allow to check the information of each UPS status during parallel mode.



4.3 inch Touch Screen



7 inch Touch Screen



Normal Mode



Bypass Mode



Warning Mode



U disk Upgrade



More Options

- Flexible Network Management: SNMP
- Expanded dry contact kit(4 in 4 out)
- BMS kit for lithium battery communication
- Intelligent Battery Monitoring System
- Battery tripping kit
- N+X in parallel
- Input and output isolation transformer
- SPD: C Grade
- Battery Charge Temperature Compensation



BMS Kit



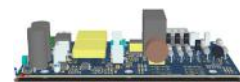
Expanded Dry Contact Kit



C Level SPD



SNMP kit



Battery tripping kit

S3300 Technical Specifications

MODEL	S3300-60	S3300-80	S3300-100	S3300-120	S3300-160	S3300-200
Voltage (Vac)	380/400/415 (138~485 L-L)					
Frequency (Hz)	40~70					
Power Factor	≥0.99					
Phase	3φ4W+PE					
THDi	≤2% (linear load, full load); ≤3% (nonlinear load, full load)					
BYPASS						
Bypass Voltage (Vac)	380/400/415: -20%~+15%					
Frequency Range (Hz)	50/60(±5%/±10%)					
Overload	≤130%: long run; 131%-150%: 5min; 151%-200%: 1s; 201%-300%: 100ms; >300%: protect immediately.					
OUTPUT						
Capacity (kVA)	60	80	100	120	160	200
Power Factor	1 (0.5 leading to 0.5 lagging)					
Voltage (Vac)	380/400/415±1%					
Frequency (Hz)	50/60±0.1% (Battery mode)					
Phase	3φ4W+PE					
Three Phase Difference	≤1%					
THDv with 100% load	<1% at linear load, <3% at non-linear load					
Transfer Time (ms)	0					
AC-AC Efficiency	up to 96.5%					
Overload*	≤105%:Long run; 106%-110% load: 60 mins, 111%-125% load: 10 mins, 126%-150% load:1 min, >150% load: 200ms					
BATTERY						
Battery Voltage (Vdc)*	±192(±168 ~±288 adjustable)		±240(±168 ~±288 adjustable)			
BATT Type	External					
Charging Current (A) MAX*	30				60	
GENERAL						
Communication Interface	RS485, MODBUS, dry contact (RS232, BMS,SNMP, expend dry contact card are optional in slot)					
Display	4.3-inch Touch screen+LED+LED bar				7-inch touch screen+LED+LED bar	
Alarm	AC input abnormal, low battery, overload, failure					
Protection	Output short-circuit, overload, over-temperature, battery low voltage, output over/low voltage					
Noise (dB)	<65					
Altitude(m)	0-2000 no derate. 2000-3000 m derate power by 1 % per each 100 m increase					
IP	20					
Working Temperature (°C)	0 ~ 40 no derate,40~50 auto derate.					
Relative Humidity	0 ~ 95%, no condensation					
Dimension (WxDxH)(mm)	400x960x1200				600x1000x1600	
Weight (kg)	145	159	161	163	310	312

• Specification is subject to change without prior notice.

* Condition comply



SATRON Power Solutions
Approach your local SATRON Power Solutions
representative for further support.
Contact details can be found on:
www.satronpower.com