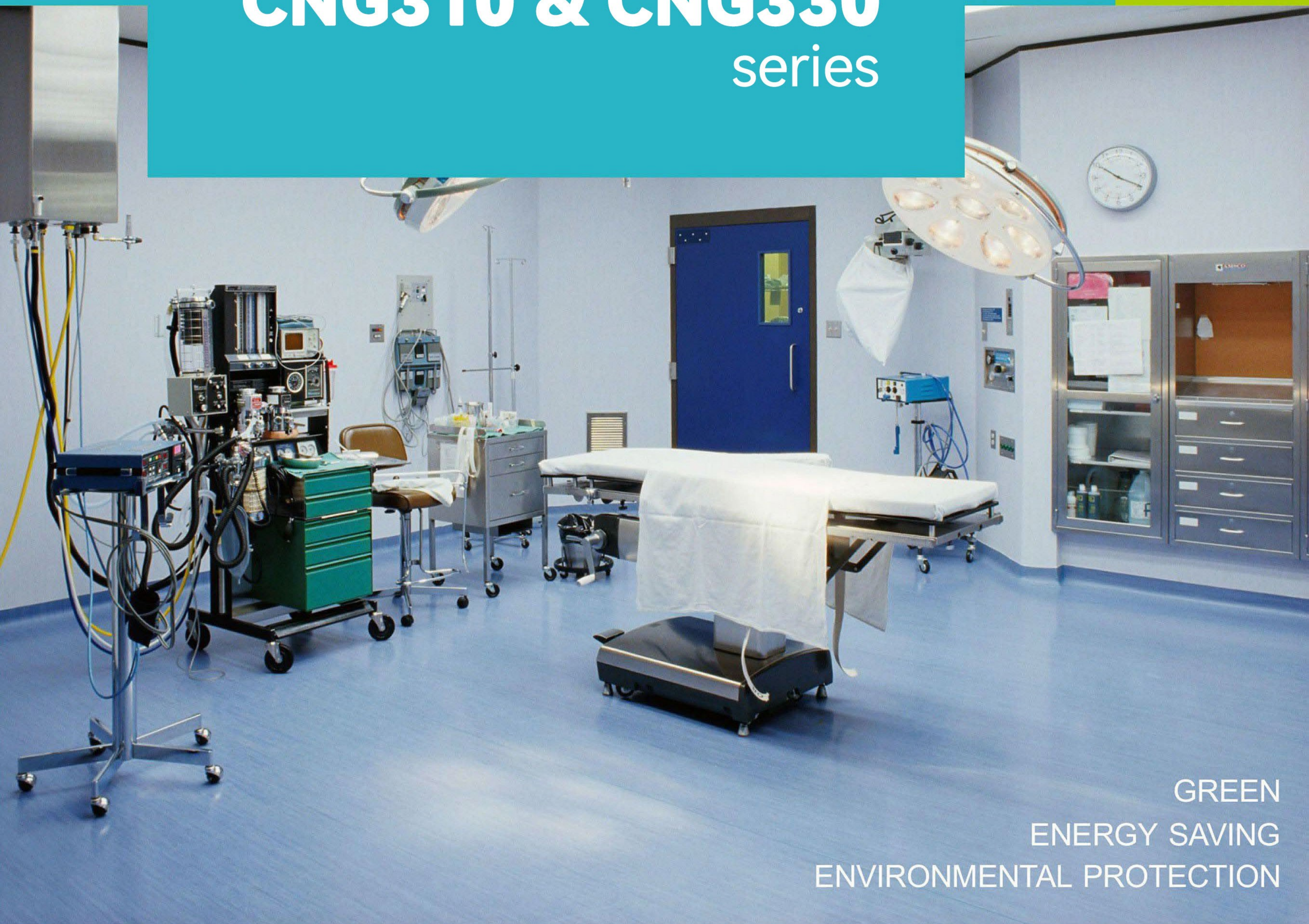


Low Frequency Online UPS 10-600KVA
CNG310 & CNG330
series



GREEN
ENERGY SAVING
ENVIRONMENTAL PROTECTION

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Constant Electric Power
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CNG310 & CNG330 Series

Low Frequency Online UPS 10–600KVA

Data Center

Local Area

Industrial Processes

Servers



Product Snapshot

Model: CNG310 10-100KVA(3Ph/1Ph)
Model: CNG330 10-600KVA(3Ph/3Ph)
Nominal Input Voltage: 380/400/415VAC
Output Power Factor: 0.8/0.9(optional)
Parallel: Maximum 6 PCS UPS
Battery can be shared in parallel mode



High intelligence and reliable power supply:

Due to its outstanding mechanical and electrical design, CNG310/CNG330 series UPS provides maximum protection for vital mission-critical networks, security applications (electro-medical) and industrial applications.

The load is powered continuously by the inverter with a filtered, stabilized and regulated sinewave supply. The input and output EMI filters considerably increase the immunity of the load to mains disturbances and surges.

The CNG310/CNG330 uses on-line double conversion technology (VFI) with isolation transformer on the inverter output.

The CNG310/CNG330 is supplied with Watch & Save 3000 software as standard and can be remotely monitored using the Power NetGuard system from anywhere in the world. Additional battery extension packs allow the standard battery runtime to be extended up to several hours.

APPLICATION:

Servers
Local area Network(LAN)
Data centers
Telecommunications
Electro-medical equipment

MAXIMUM BATTERY CARE:

- Battery deep discharge protection;
- Temperature compensating charger;
- Built-in automatic and manual battery test feature.

MINIMUM IMPACT ON SUPPLIES EASY SOURCE:

Input current distortion <4% for the CNG310/CNG330 with filter with sinusoidal absorption to remove the risk of resonance with other input supply users or phase shift capacitor sets. The absorbed current distortion is independent of input supply parameters such as impedance. This enable CNG310/CNG330 to deliver maximum performance levels regardless of the installation environment. With these input features CNG310/CNG330 can achieve significant savings in terms of sizing and power supply courcesiso- ation transformers and generators over less sophisticated power systems.

SIMPLE TO INSTALL:

- Capability to install the UPS into any distribution system(neutral not required on rectifier input);
- Capability to separate the rectifier/bypass power networks and to power them from two separate sources, without Galvanic isolation (Necessary on UPS without an output transformer).

HIGH RELIABILITY:

- Extremely high short-circuit current to ensure compatibility with the most difficult transformer applications (lighting, drives and industrial processes) and an isolation transformer on the inverter output;
- Full microprocessor control with no-break static and manual bypasses;
- IGBT technology.

OTHER CHARACTERISTICS:

- CNG310/CNG330 suitable for powering ICT and Industrial loads;
- High level diagnostics: event log with 128 messages, states, measurements and alarms-available from the built-in LCD with several languages;
- BACK FEED protection: to avoid energy feeding back into the mains supply cause a fault occur.

MAXIMUM RELIABILITY AND AVAILABILITY:

Connect up to 6 units in parallel or N+1 redundancy, even of different power ratings. The UPS continue to work in parallel even if one of the interconnecting communication cables is disconnected(CLOSEDLOOP).

PRODUCTION & APPLICATION:



LOW CONSUMPTION LEVELS:

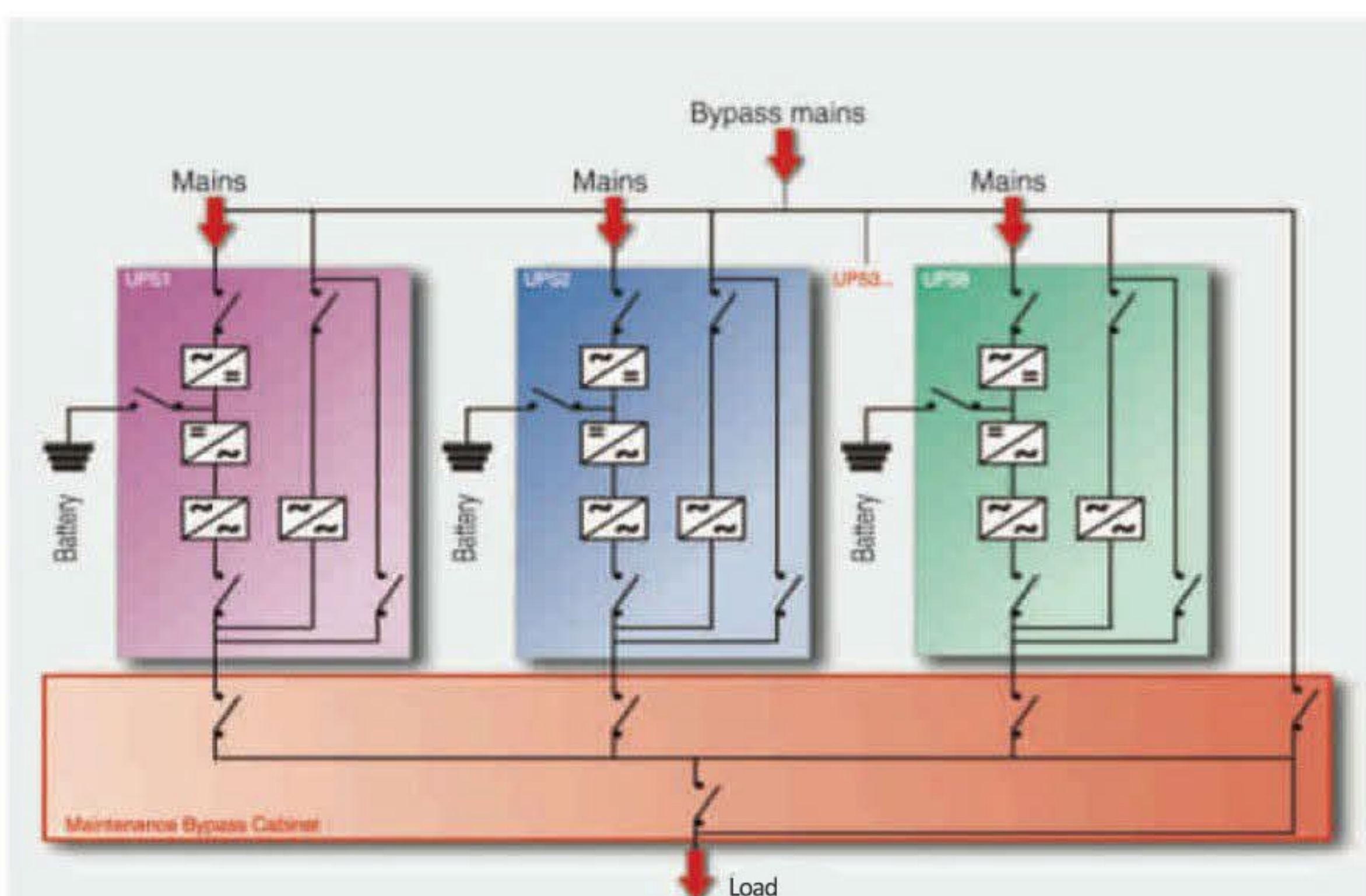
CNG310/CNG330 can achieve efficiencies >98% thanks to selectable Economy Mode which can be used in stable electrical environments to provide power supply continuity when the mains fail.

ADVANCE COMMUNICATION:

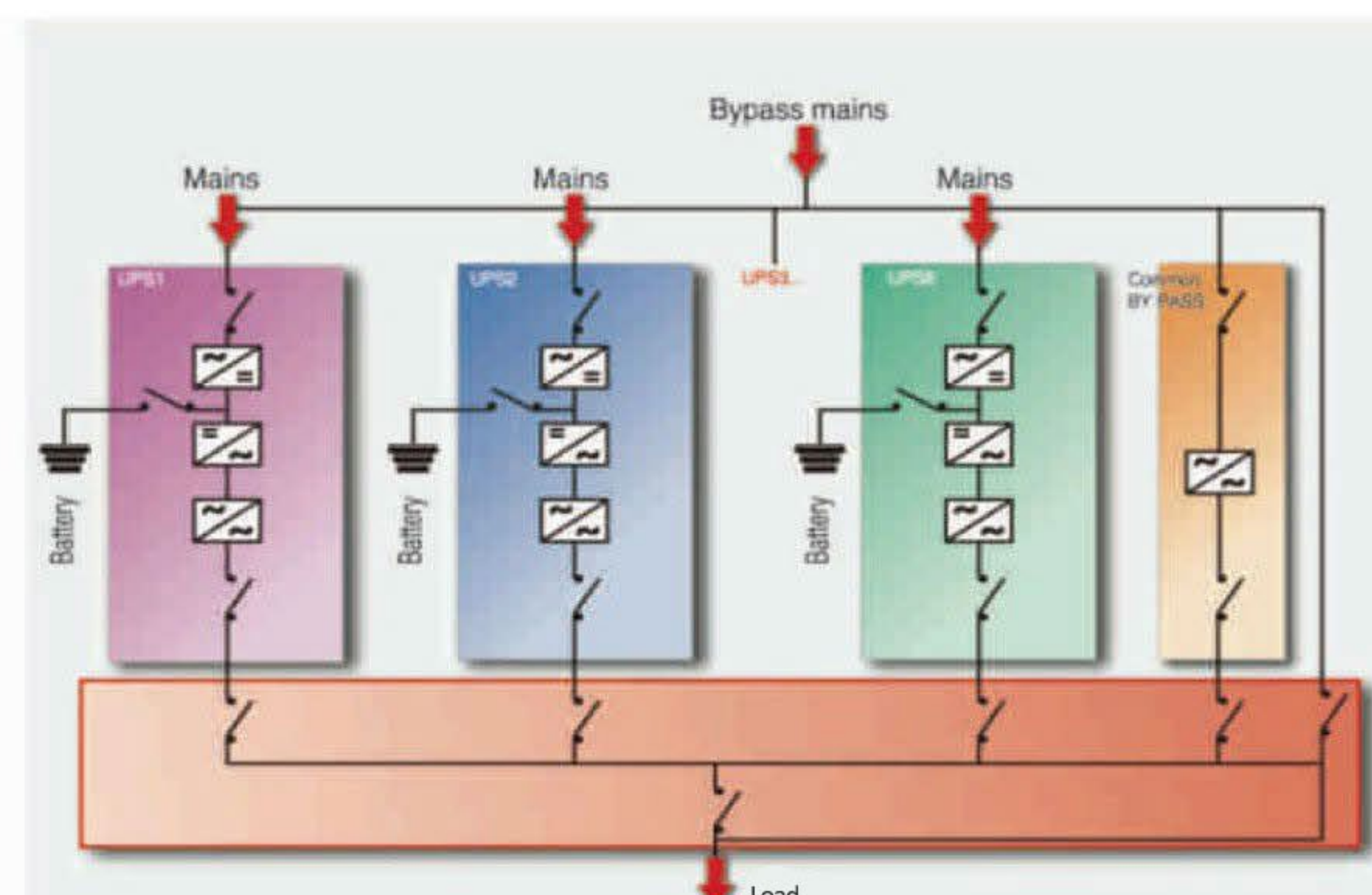
- Compatible with TeleNetGuard for remote maintenance;
- Advanced, multi-platform communication for all operation systems and network environments: Watch & Save 3000 monitoring and shut-down software included, with SNMP agent, for Windows 2008,Vvista,2003,XP; Mac OS X, Linux, Novel and most popular Unix operatingsystems;
- The UPS is supplied with a cable for direct connection to the PC(Plug and Play)
- RS232 double Serial port Installation slot for an Emergency Power Off (EPO) interface to allow the UPS to be switched off remotely in an emergency
- Generator interface: enables desynchronisation ofthe UPS output from a generator supply which may be subject to phase and frequency variations. The interface also enables more economic use of the battery charge..

EXPANDABILITY:

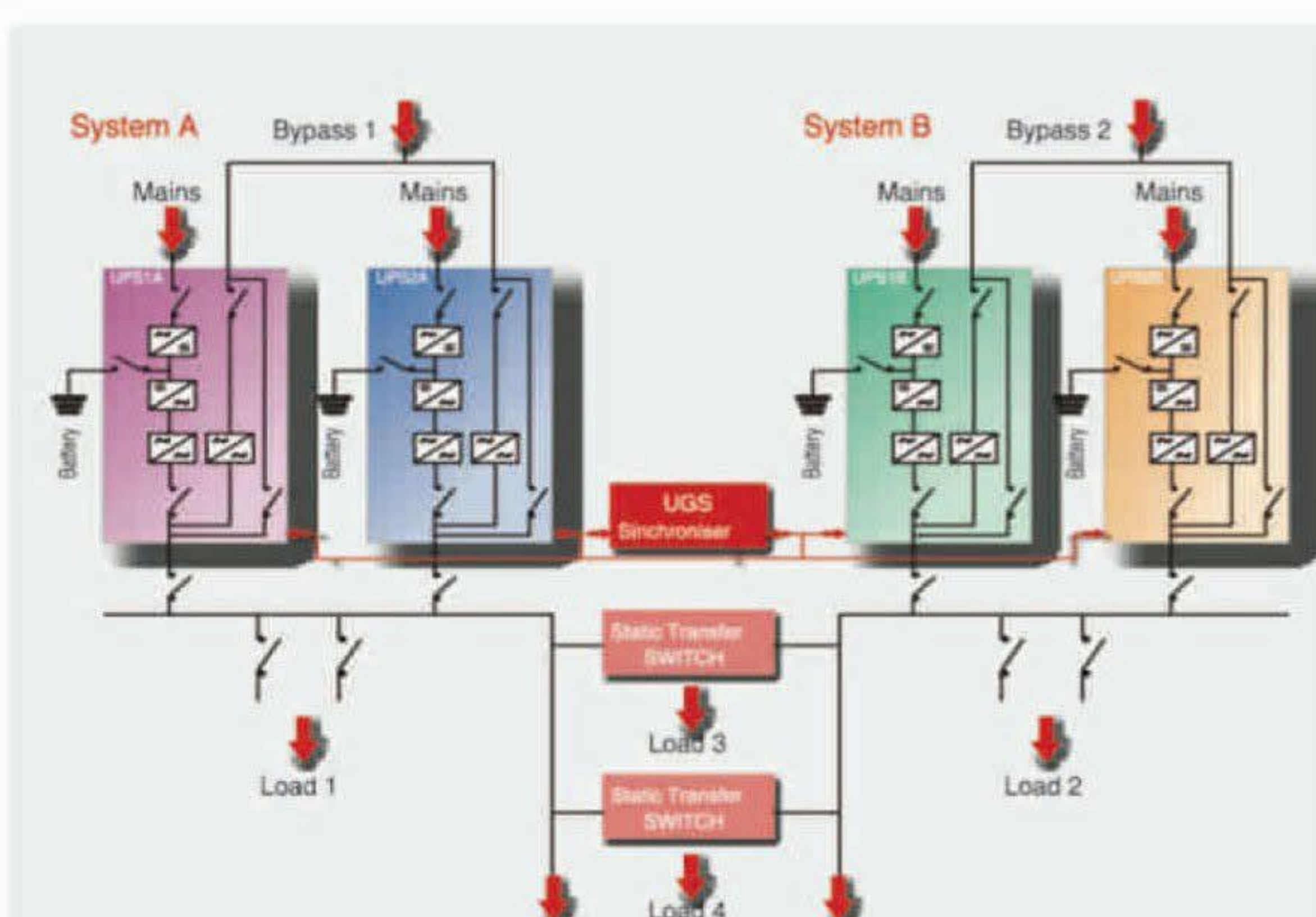
- The units can be connected in parallel up to 6 units to increase power availability or redundancy. The single module or the system can be expanded any time to suit power requirements without influencing the initial investment.
- Thanks to the peculiarity of the “Hot System Expansion” feature, the additional unit can be connected in parallel while the other units are on-line and supplying regular power to the load. The new UPS is on-line and will be set up automatically.



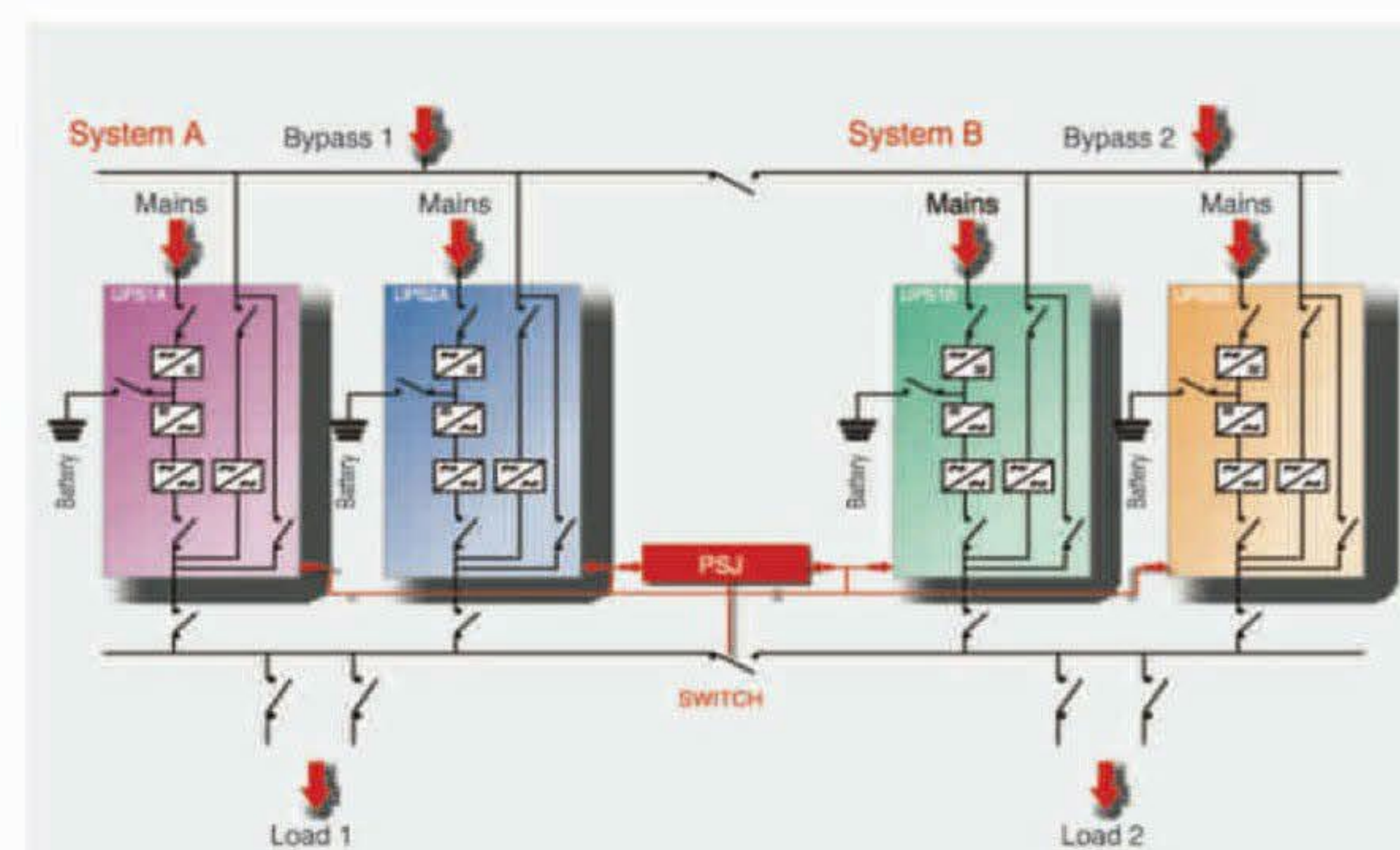
Parallel configuration of up to 6 units with distributed bypass
Parallel architecture which guarantees the redundancy of the power source.
+ Flexibility and modularity



Parallel configuration of up to 6 units with common bypass
Parallel architecture which guarantees the redundancy of the power source.
with autonomous bypass management.
+ Selectivity downstream faults in bypass mode.



Dynamic dual bus configuration
Solution which ensures redundancy until the distribution of the power supply to the loads + Downstream fault discrimination



Dual bus system configuration
Solution which guarantees the redundancy of the power supply even during maintenance + High levels of availability and redundancy

CNG310 Series Technical Specifications

CNG310 10-100KVA								
Model	10KVA	15KVA	20KVA	30KVA	40KVA	60KVA	80KVA	100KVA
Capacity	8KW	12KW	16KW	24KW	32KW	48KW	64KW	80KW
Input								
Rated Voltage	380/400/415 Vac three-phase							
Voltage Range	±20%							
Frequency Range	45-65Hz							
Range(Hz)	50±5%(±10%)Bypass synchronization tracking							
Rectifying Pulse Number	6 pulse rectification							
Phase System	3φ4W +PE(Three phase five wire system)							
Battery Voltage(VDC)	384							
Battery Quantity(Section)	Standard with 32(30~34, can be set through the LCD panel)							
Output								
Power Factor	0.8/0.9 (optional)							
Voltage(V)	L-N: 220±1%							
Voltage Regulation	<1%(online and battery mode) at 100% linear load,<2% allow 100% imbalance							
Frequency(Hz)	Normal power, tracking the frequency of power, Frid abnormal.50±0.2%							
Transfer Time(ms)	0							
Recovery Time	Dynamic load voltage transient <5%, recovery within 5ms							
Waveform Distortion	Linear load THD 3%: Nonlinear load THD 5%							
Overload Capacity	125% full load for 10 minutes, maintain 150% full load for 1 minute and then switch to bypass power supply, after reducing the load can automatically restore the inverter							
Crest Factor	3:1							
System								
Communication Function	Provides dry contract communication and RS232/RS485, Optional SNMP option to achieve intelligent monitoring of UPS							
Panel Display	LED displays working status and fault indication: LCD displays three-phase input voltage, input frequency, output voltage, load, battery voltage, battery charge and discharge current, etc							
Display	LCD 7' touch screen display							
The Audio Noise(dB)	<65(within 1 meter)							
Alarm Function	Battery low voltage, abnormal power supply, overload, UPS failure, over temperature protection							
Protection	Input over voltage, battery under voltage, overload, short circuit, over temperature protection							
Cooling Way	Forced cooling							
Operating Temperature(°C)	-10~35 without de-rating							
Humidity	0~95%, non-condensing							
Max Altitude	Rated power at 1000m,(increase 100m and decrease by -1%), maximum 4000m							
Protect Level	IP20							
Size (W*D*H)(mm)	434*624*946			540*657*1132		555*725*1290		800*745*1700
Net Weight(KG)	173	199	211	254	306	385	390	665
Gross Weight(KG)	196	222	233	276	329	415	419	724

STANDA D: Conform to GB/IEC regulation: EMC: CB7260. 2/IEC62040-2 -GB/17626.2~5/IEC61000-4-2~5 SAFETY: GB4943

Note: Product specifications are subject to change without further notice.



CNG330 Series Technical Specifications

CNG330 10-600KVA															
Model	10KVA	20KVA	30KVA	40KVA	60KVA	80KVA	100KVA	120KVA	160KVA	200KVA	250KVA	300KVA	400KVA	500KVA	600KVA
Capacity	8KW	16KW	24KW	32KW	48KW	64KW	80KW	96KW	128KW	160KW	200KW	240KW	320KW	400KW	480KW
Input															
Rated Voltage	400 Vac three-phase														
Voltage Range	380/400/415VAC (±25%, Can be set through the LCD panel)														
Frequency Range	40-70Hz (Automatically select synchronization range according to grid frequency)														
Range(Hz)	50±5%(±10%)Bypass synchronization tracking														
Rectifying Pulse Number	6 pulse rectification									6/12 pulse rectification				12 pulse rectifier	
Phase System	3φ4W +PE(Three phase five wire system)														
Battery Voltage(VDC)	384													480	
Battery Quantity(Section)	Standard with 32(30~34, can be set through the LCD panel) Standard 40 knots (38~42 knots, can be set by LCD panel)														
Output															
Power Factor	0.8/0.9 (optional)														
Voltage(V)	L-N: 220±1% L-L: 380±1%														
Voltage Regulation	<1%(online and battery mode) at 100% linear load,<2% allow 100% imbalance														
Frequency(Hz)	Normal power, tracking the frequency of power, Frid abnormal.50±0.2%														
Transfer Time(ms)	0														
Recovery Time	Dynamic load voltage transient <5%, recovery within 5ms														
Waveform Distortion	Linear load THD 3%: Nonlinear load THD 5%														
Overload Capacity	125% full load for 10 minutes, maintain 150% full load for 1 minute and then switch to bypass power supply, after reducing the load can automatically restore the inverter														
Crest Factor	3:1														
System															
Communication Function	Provides dry contract communication and RS232/RS485, Optional SNMP option to achieve intelligent monitoring of UPS														
Panel Display	LED displays working status and fault indication: LCD displays three-phase input voltage, input frequency, output voltage, load, battery boltage, battery charge and discharge current, etc														
Display	LCD 7’ touch screen display														
The Audio Noise(dB)	<65(within 1 meter)														
Alarm Function	Battery low voltage, abnormal power supply, overload, UPS failure, over termperature protection														
Protection	Input over voltage, battery under voltage, overload, short circuit, over temperature protection														
Cooling Way	Forced cooling														
Operating Temperature(°C)	-10~35 without de-rating														
Humidity	0~95%, non-condensing														
Max Altitude	Rated power at 1000m, (increase 100m and decrease by -1%), maximum 4000m														
Protect Level	IP20														
Size (W*D*H)(mm)	434*624*946		540*657*1132		555*725*1290		800*745*1700		800*850*1900		1204*850*1900			2600*1200*2000	
Net Weight(KG)	173	211	254	306	385	390	665	675	805	900	1080	1200	1300	1768	1972
Gross Weight(KG)	196	233	276	329	415	419	724	730	863	973	1160	1275	1375	1880	2190

STANDA D: Conform to GB/IEC regulation: EMC: CB7260. 2/IEC62040-2 -GB/17626.2~5/IEC61000-4-2~5 SAFETY: GB4943

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