

▶▶▶ CATALOG

- PGM Series 10~150KVA 3-phase Rack-Modular UPS 03-06
- PGM Series 30~1200KVA 3-phase Tower-Modular UPS 07-14
- PX Series 150~180KVA Power Distribution System 15-16
- PGH Series 1~10KVA 1-phase Tower UPS 17-24
- PGH Series 10~2000KVA 3-phase Tower UPS 25-36
- PGH Series 1~10KVA 1-phase Rack UPS 37-44
- PGH Series 10~60KVA 3-phase Rack UPS 45-48
- PGI Series 10~600KVA 3-phase UPS 49-52

COMPANY PROFILE

Coolnet focuses on the R&D, production, and application of data center integrated solutions. As technical consulting, product supply, system integrator, and service provider, it is committed to serving customers in the fields of communication equipment rooms, data centers, smart construction, and energy management.

Our solutions include data center temperature, humidity, and energy-saving solutions, small and medium-sized computer room temperature control solutions, micro-module data center solutions, micro-module cabinet solutions, container, and modular data center solutions, communication outdoor cabinet temperature control and energy saving Solutions, cabinet temperature and humidity, and energy-saving solutions.

Has rich research and manufacturing experience in the field of data center equipment, with world-class laboratories, production testing equipment, and a complete line of key equipment rooms. And passed the ISO9001 quality management system certification, ISO14001 environmental management system certification, and the products have passed CE certification, CCC certification, CQC certification, CRAA quality certification, etc.

We are committed to "paying attention to customer needs and realizing customer value" and establishing a win-win cooperation pattern with customers. To become your most trustworthy, most grateful, most professional, most practical, and most reliable partner with the best vision. We will "make every effort to provide value for money products and services to make customers more competitive", and continue to explore and innovate.



>>> Power Guard

PGM Series Rack-mounted Modular UPS Three Phase In Three Phase Out 10~60KVA

Superior overload capacity

Superior overload capacity to make the power supply system more reliable.

User-friendly design

LCD liquid crystal display, which can display the working status and parameter information of UPS in real time, facilitating user management of UPS.

Grid friendly

Energy saving green power with high input power factor and low THDI.

Energy saving

Under normal use, the product will not cause harm to people and the environment.



Product Description

CNM series rack-mount modular UPS uninterruptible power supply system is a highly reliable product designed to meet the higher requirements of power systems. The system adopts on-line double-conversion structure and three-in-three-out operation mode; the power system consists of multiple individual power modules connected in parallel and operates under the condition of no main synchronisation, which realises N+X parallel redundancy backup work and greatly improves the reliability of the system as a whole;

Main Feature

- Mounted in 19 inch rack, or stand alone
- 7 inch touch LCD, with IoT functions
- High reliability and environment adaptability, with protection of components level
- Extreme power density design, easy to install, space-saving, good maintenance
- Support battery without centerline (optional), more diversified application scenarios.

Model PGM	020/10RTL	040/10RTL	060/10RTL
Rate Power	20KVA/20KW	40KVA/40KW	60KVA/60KW
Main input			
Input	(3P+N+PE)		
Rate Voltage	380/400/415VAC(L-L);220/230/240VAC(L-N)		
Rate Freq.	50/60Hz		
Input PF	>0.99		
Current Distortion	THDi<3%(100%Linear load)		
Voltage Range	304-478VAC(L-L)full load;304-228VAC(L-L)power derate from 100%to 75%		
Freq.Range	40-70Hz		
Battery			
Rate voltage	±240VDC(adjustable for20-50 sections) Optional480VDC(adjustable for 20-50 sections)		
Charging Capacity	20%*Pout		
Bypass			
Rate Voltage	380/400/415VAC(L-L);220/230/240VAC(L-N)		
Voltage Range	default-20%~+15%;upper limit:+10%,+15%,+20%,+25%;lower limit:-10%,-15%,-20%,-30%,-40%		
Overload	110%,long time operation;110%<load<125%,5 mins 125%<load<150%,1 min;>150%,1 second		
Inverter			
Rate Voltage	380/400/415VAC(L-L);220/230/240VAC(L-N)		
Rate Freq.	50/60Hz		
Output PF	1		
Voltage Accuracy	±1.0%		
Load Response	<5%(20%-80%-20%step load)		
Recovery Time	<20ms(0%-100%-0%step load)		
Output THDu	<1%(linear load),<5%(non-linear load according to IEC62040-3)		
Overload	110%,1hour;125%,10 mins;150%,1 min;>150%,200ms		
Frequency Accuracy	0.1%		
Synchronize Window	Settable,±0.5Hz±5Hz,default±3Hz		
Slew Rate	Settable,0.5Hz/S-3Hz/S,default 0.5Hz/S		
Phase Accuracy	120°±0.5°		
System			
Efficiency	Normal Mode≥96.5%;Battery Mode≥96.5%		
Display	LED+7inch touch LCD		
Certification-Safety	IEC62040-1,IEC60950-1		
Certification-EMS	IEC62040-2;IEC61000-4-2(ESD);IEC61000-4-3(RS);IEC61000-4-4(EFT);IEC61000-4-5(Surge)		
IP Degree	IP20		
Configuration	USB,RS232,RS485,Dry contact,Cold start		
Option	SNMP card,Extended dry contact,Parallel kit,APPWiFi/Bluetooth		
Environment	0-40℃(operation);-25~70(storage);0-95%(Humidity,non-condensing)		
Noise(dB)(1meter)	65dB@100%load,62dB@45%load		
Dimension			
Cabinet(W*D*H)mm	442*710*307(7U)	442*710*485(11U)	442*858*883(20U)
Module(W*D*H)mm	400*495*86(2U)		

Power Guard

PGM Series Rack-mounted Modular UPS Three Phase In Three Phase Out 15~150KVA



Zero Switch

The UPS will switch to battery mode when the mains power is normal Zero time, which can effectively ensure the safety and reliability of the instrument.



Active Input Power Factor Correction (PFC)

Active power factor correction with digital control achieves ≥ 0.99 input power factor, preventing grid pollution, energy-saving, and cost-reducing.



Load power factor of

Adapts to the characteristics of most current-carrying capacity of the machine.

DSP

DSP digital control technology

All power conversion links such as rectification, inverter charging, and discharge are digitally controlled.



Main Feature

- Standard cabinet in-row rack mounting
- supports mounting methods: rack mounting, tower mounting
- Device-level protection for extreme reliability and greater environmental adaptability;
- Standard 7-inch LCD touch screen with colorful graphic display. Easy to operate, friendly man-machine interface;
- Extreme power density design, 25kW module only 2U, easy to install, space saving, good maintenance;
- Support battery without centerline configuration (optional), more diversified application scenarios.

Applications

Government, Finance, IT, Education, Transportation, Broadcasting, Medical, Energy, etc.

Model PGM	30/15RTL	40/20RTL	50/25RTL	60/15RTL	80/20RTL	100/25RTL	090/15RTL	120/20RTL	150/25RTL
Rate Power	30KVA/30K	40KVA/40K	50KVA/50K	60KVA/60K	80KVA/80K	100KVA/10	90KVA/90K	120KVA/12	150KVA/15
Main input									
Input	(3P+N+PE)								
Rate	380/400/415VAC(L-L);220/230/240VAC(L-N)								
Rate Freq.	50/60Hz								
Input PF	>0.99								
Current	THDi $<3\%$ (100%Linear load)								
Voltage	304-478VAC(L-L)full load;304-228VAC(L-L)power derate from 100%to 50%								
Freq. Range	40-70Hz								
Battery									
Rate	± 240 VDC(adjustable for 30-50 sections)								
Charging	20%*Pout								
Bypass									
Rate	380/400/415VAC(L-L);220/230/240VAC(L-N)								
Voltage	default -20%~+15%;upper limit: +10%, +15%, +20%, +25%;lower limit: -10%, -15%, -20%, -30%, -40%								
Overload	110%, long time operation; 110% $<$ load $<$ 125%, 5 mins								
Inverter									
Rate	380/400/415VAC(L-L);220/230/240VAC(L-N)								
Rate Freq.	50/60Hz								
Output PF	1								
Voltage	$\pm 1.0\%$								
Load	$<5\%$ (20%-80%-20%step load)								
Recovery	<20 ms(0%-100%-0%step load)								
Output	$<1\%$ (linear load), $<5\%$ (non-linear load according to IEC62040-3)								
Overload	110%, 1hour; 125%, 10 mins; 150%, 1min; $>150\%$, 200ms								
Frequency	0.1%								
Synchroniz	Settable, ± 0.5 Hz ± 5 Hz, default ± 3 Hz								
Slew Rate	Settable, 0.5Hz/S -3Hz/S, default 0.5Hz/S								
Crest	3:1								
Phase	$120^\circ \pm 0.5^\circ$								
System									
Efficiency	Normal Mode $\geq 96.5\%$; Battery Mode $\geq 96.5\%$								
Display	LED+7inch touch LCD								
Certificatio	IEC62040-1, IEC60950-1								
Certificatio	IEC62040-2; IEC61000-4-2(ESD); IEC61000-4-3(RS); IEC61000-4-4(EFT); IEC61000-4-5(Surge)								
IP Degree	IP20								
Configurati	USB, RS232, RS485, Dry contact, Cold start								
Option	SNMP card, Extended dry contact, Parallel kit, LBS, APPWiFi/Bluetooth								
Environme	0-40 $^\circ$ C (operation); -25~70 (storage); 0-95% (Humidity, non-condensing)								
Noise(dB)(65dB@100%load, 62dB @45%load								
Dimention									
Cabinet(W	442*710*307(7U)			442*858*705(16U)			442*858*883(20U)		
Module(W*	400*495*86(2U)								

Power Guard

PGM Series Tower-mounted Modular UPS Three Phase In Three Phase Out 30~300KVA



Zero Switch

The UPS will switch to battery mode when the mains power is normal Zero time, which can effectively ensure the safety and reliability of the instrument.



Active Input Power Factor Correction (PFC)

Digital-controlled active power factor correction achieves ≥ 0.99 input power factor for grid protection, energy saving and cost reduction.



Real time monitoring and alarm

Detect important parameters in real time, and immediately give an alarm if any abnormality is found.



Can be used with a generator

The wide range of input voltages and frequencies isolates the bad power generated by the generator to provide a pure, stable power supply to the load.



Product Description

The CNM series modular UPS provides the most compact footprint of less than 2 m³ with maximum capacity of 900kVA. With best reliability and high performance, it has been leading the domestic market for years. CNM series is considered to be the best power protection solution for large data centers, as well as for sensitive electronics.

Main Feature

- Support for mounting: rack-mount, tower-mount. 300k model can support micro-module in-line installation;
- Device-level protection for extreme reliability and greater environmental adaptability;
- Extra-large LCD touch screen with colorful graphic display. Easy to operate, friendly man-machine interface;
- Extreme power density design, 30kW module only 2U
- Real-time monitoring of the temperature of key devices, early warning, convenient operation and maintenance.



Model PGM	120/30TTL	180/30TTL	300/30TTL
Rate Power	120KVA/120KW	180KVA/180KW	300KVA/300KW
Main input			
Input	(3P+N+PE)		
Rate Voltage	380/400/415VAC(L-L);220/230/240VAC(L-N)		
Rate Freq.	50/60Hz		
Input PF	>0.99		
Current Distortion	THDI<3%(100%Linear load)		
Voltage Range	304-478VAC(L-L)full load;304-228VAC(L-L)power derate from 100%to 50%		
Freq.Range	40-70Hz		
Battery			
Rate voltage	± 240 VDC(adjustable for 30-50 sections)		
Charging Capacity	20%*Pout		
Charging Accuracy	$\pm 1\%$		
Bypass			
Rate Voltage	380/400/415VAC(L-L);220/230/240VAC(L-N)		
Voltage Range	default:-20%~+15%;upper limit:+10%,+15%,+20%,+25%;lower limit:-10%,-15%,-20%,-30%,-40%		
Overload	110%,long time operation;110%<load<125%,5 mins		
Inverter			
Rate Voltage	380/400/415VAC(L-L);220/230/240VAC(L-N)		
Rate Freq.	50/60Hz		
Output PF	1		
Voltage Accuracy	$\pm 1.0\%$		
Load Response	<5%(20%-80%-20%step load)		
Recovery Time	<20ms(0%-100%-0%step load)		
Output THDu	<1%(linear load),<5%(non-linear load according)		
Overload	110%,1hour;125%,10mins;150%,1 min;>150%,200ms		
Frequency Accuracy	0.1%		
Synchronize Window	Settable,+0.5Hz \pm 5Hz,default+3Hz		
Slew Rate	Settable,0.5Hz/S-3Hz/S,default 0.5Hz/S		
Crest Factor	3:1		
Phase Accuracy	120 \pm 0.5 $^\circ$		
System			
Efficiency	Normal Mode $\geq 96.5\%$;Battery Mode $\geq 96.5\%$		
Display	LED+7inch touch LCD	LED+10 inch touch LCD	
Certification-Safety	IEC62040-1,IEC60950-1		
Certification-EMS	IEC62040-2;IEC61000-4-2(ESD);IEC61000-4-3(RS);IEC61000-4-4(EFT);IEC61000-4-5(Surge)		
IP Degree	IP20		
Configuration	USB,RS232,RS485,Dry contact,Cold start		
Option	SNMP card,Extended dry contact,Parallel kit,LBS,APPWiFi/Bluetooth		
Environment	0-40 $^\circ$ C(operation);-25-70(storage);0-95%(Humidity,non-condensing)		
Noise(dB)(1 meter)	65dB@100%load,62dB@45%load		
Dimension			
Cabinet(W*D*H)mm	482*816*796(18U)	482*816*1018(23U)	600*1000*2000
Module(W*D*H)mm	440*678*85(2U)		

Power Guard

PGM Series Tower-mounted Modular UPS Three Phase In Three Phase Out 50~600KVA

Superior overload capacity
Superior overload capacity to make the power supply system more reliable.

User-friendly design
LCD liquid crystal display, which can display the working status and parameter information of UPS in real time, facilitating user management of UPS.

Load power factor of 0.9
Adapts to the characteristics of most current electrical equipment and increases the load-carrying capacity of the machine.

Grid friendly
Energy saving green power with high input power factor and low THDI.



Main Feature

- High power density, compared with similar products in the industry to save more than 10% of the floor space
- Cost-effective, support the battery without centerline design (optional), friendly to adapt to lithium-ion batteries
- Ultra-strong environmental adaptation, system-level + board-level + device-level comprehensive protection, extreme reliability
- Extra large LCD touch screen with colorful graphic display, easy to operate and friendly human-machine interface
- Highly integrated PCB design to improve product assemblability and reduce human failure rate
- Optimized cooling layout, higher design margins, 70% load capacity with single fan failure

Applications

Government, Finance, IT, Education, Transportation, Broadcasting, Medical, Energy, etc.

Model PGM	200/50TTL	300/50TTL	400/50TTL	500/50TTL	600/50TTL
Rate Power	200KVA	300KVA	400KVA	500KVA	600KVA
Main input					
Input	(3P+N+PE)				
Rate Voltage	380/400/415VAC(L-L);220/230/240VAC(L-N)				
Rate Freq.	50/60Hz				
Input PF	>0.99				
Current Distortion	THDi<2%(100%Linear load)				
Voltage Range	304-478VAC(L-L)full load;304-228VAC(L-L)power derate from 100%to 50%				
Freq.Range	40-70Hz				
Battery					
Rate voltage	±240VDC(adjustable for 30-50 sections) Optional480VDC(adjustable for 30-50 sections)				
Charging Capacity	20%*Pout				
Charging Accuracy	±1%				
Bypass					
Rate Voltage	380/400/415VAC(L-L);220/230/240VAC(L-N)				
Voltage Range	default-20%~+15%;upper limit:+10%,+15%,+20%,+25%;lower limit:-10%,-15%,-20%,-30%,-40%				
Overload	125%,long time	110%,long time operation;110%<load<125%,5 mins			
Inverter					
Rate Voltage	380/400/415VAC(L-L);220/230/240VAC(L-N)				
Rate Freq.	50/60Hz				
Output PF	1				
Voltage Accuracy	±1.0%				
Load Response	<5%(20%-80%-20%step load)				
Recovery Time	<20ms(0%-100%-0%stepload)				
Output THDu	<1%(linear load),<5%(non-linear load according to IEC 62040-3)				
Overload	110%,1hour;125%,10 mins;150%,1 min;>150%,200ms				
Frequency Accuracy	0.1%				
Synchronize Window	Settable,+0.5Hz~±5Hz,default+3Hz				
Slew Rate	Settable,0.5Hz/5-3Hz/S,default 0.5Hz/5				
Crest Factor	3:1				
Phase Accuracy	120°±0.5°				
System					
Efficiency	Normal Mode≥97%;Battery Mode≥97%				
Display	LED+7inch touch	LED+10 inch touch LCD			
Certification-Safety	IEC62040-1,IEC60950-1				
Certification-EMS	IEC62040-2;IEC61000-4-2(ESD);IEC61000-4-3(RS);IEC61000-4-4(EFT);IEC61000-4-5(Surge)				
IP Degree	IP20				
Configuration	USB,RS232,RS485,Dry contact,Cold start,Air filter				
Option	SNMP card,Extended dry contact,Parallel kit,SPD,APPW/Fi/Bluetooth,Up air supply components				
Environment	0-40℃(operation);-25~70(storage);0-95%(Humidity,non-condensing)				
Noise(dB)(1meter)	68dB@100%load,65dB @45%load				
Wiring Method	Front top feed,or optionalfront bottom	Compatible with top and bottom feeds			
Dimension					
Cabinet(W*D*H)mm	600*750*1600	600*750*2000	600*850*2000	1200*850*2000	
Module(W*D*H)mm	440*475*140				

>>> Power Guard

PGM Series Tower-mounted Modular UPS Three Phase In Three Phase Out 60~600KVA

Superior overload capacity
Superior overload capacity to make the power supply system more reliable.

User-friendly design
LCD liquid crystal display, which can display the working status and parameter information of UPS in real time, facilitating user management of UPS.

Load power factor of 0.9
Adapts to the characteristics of most current electrical equipment and increases the load-carrying capacity of the machine.

Grid friendly
Energy saving green power with high input power factor and low THDI.



Main Feature

- DSP full digital control, rectifier, inverter, charging, discharging. All power conversion links are digitally controlled;
- Device-level protection for extreme reliability and greater environmental adaptability;
- Extra large color LCD touch screen-10 inch LCD touch screen with colorful graphic display, easy to operate and friendly human-machine interface
- Intelligent system self-diagnostic program, rich fault records, large-capacity history record storage space;
- Maximum capacity support 1.8MW, the best choice for ultra-large data centers.

Applications

Government, Finance, IT, Education, Transportation, Broadcasting, Medical, Energy, etc.

Model PGM	300/60TTL	600/60TTL
Rate Power	300KVA/300KW	600KVA/600KW
Main input		
Input	(3P+N+PE)	
Rate Voltage	380/400/415VAC(L-L);220/230/240VAC(L-N)	
Rate Freq.	50/60Hz	
Input PF	>0.99	
Current Distortion	THDi<3%(100%Linearload)	
Voltage Range	304-478VAC(L-L)full load;304-228VAC(L-L)power derate from 100%to 50%	
Freq.Range	40-70Hz	
Battery		
Rate voltage	±240VDC(adjustable for 30-50 sections)	
Charging Capacity	20%*Pout	
ChargingAccuracy	±1%	
Bypass		
Rate Voltage	380/400/415VAC(L-L);220/230/240VAC(L-N)	
Voltage Range	default-20%~+15%;upper limit:+10%,+15%,+20%,+25%;lower limit:-10%,-15%,-20%,-30%,-40%	
Overload	110%,long time operation;110%<load<125%,5 mins	
Inverter		
Rate Voltage	380/400/415VAC(L-L);220/230/240VAC(L-N)	
Rate Freq.	50/60Hz	
Output PF	1	
Voltage Accuracy	±1.0%	
Load Response	<5%(20%-80%-20%step load)	
Recovery Time	<20ms(0%-100%-0%step load)	
Output THDu	<1%(linear load),<5%(non-linear load according to IEC62040-3)	
Overload	110%,1hour;125%,10 mins;150%,1 min;>150%,200ms	
Frequency Accuracy	0.1%	
Synchronize Window	Settable,+0.5Hz~+5Hz,default+3Hz	
Slew Rate	Settable,0.5Hz/S~3Hz/S,default 0.5Hz/S	
Crest Factor	3:1	
Phase Accuracy	120°±0.5°	
System		
Efficiency	Normal Mode≥97%;Battery Mode≥97%	
Display	LED+10 inch touch LCD	
Certification-Safety	IEC62040-1,IEC60950-1	
Certification-EMS	IEC62040-2;IEC61000-4-2(ESD);IEC61000-4-3(RS);IEC61000-4-4(EFT);IEC61000-4-5(Surge)	
IP Degree	IP20	
Configuration	USB,RS232,RS485,Dry contact,Cold start,Air filter	
Option	SNMP card,Extended dry contact,Parallel kit,SPD,APPWi-Fi/Bluetooth,	
Environment	0-40℃(operation);-25~70(storage);0-95%(Humidity,non-condensing)	
Noise(dB)(1meter)	72dB@100%load,69dB @45%load	
Dimension		
Cabinet(W*D*H)mm	600*1000*2000	1200*1100*2000
Module(W*D*H)mm	442*659*174	

Power Guard

PGM Series Tower-mounted Modular UPS Three Phase In Three Phase Out

100~1200KVA

Superior overload capacity
Superior overload capacity to make the power supply system more reliable.

User-friendly design
LCD liquid crystal display, which can display the working status and parameter information of UPS in real time, facilitating user management of UPS.

Load power factor of 0.9
Adapts to the characteristics of most current electrical equipment and increases the load-carrying capacity of the machine.

Grid friendly
Energy saving green power with high input power factor and low THDI.



Main Feature

- DSP full digital control, rectifier, inverter, charging, discharging. All power conversion links are digitally controlled;
- Device-level protection for extreme reliability and greater environmental adaptability;
- Extra large color LCD touch screen-10 inch LCD touch screen with colorful graphic display, easy to operate and friendly human-machine interface
- Intelligent system self-diagnostic program, rich fault records, large-capacity history record storage space;
- Maximum capacity support 1.8MW, the best choice for ultra-large data centers.

Applications

Government, Finance, IT, Education, Transportation, Broadcasting, Medical, Energy, etc.

Model PGM	600/100TTL	800/100TTL	1000/100TTL	1200/100TTL
Rate Power	600KVA/600KW	800KVA/800KW	1000KVA/1000KW	1200KVA/1200KW
Main input				
Input	(3P+N+PE)			
Rate Voltage	380/400/415VAC(L-L);220/230/240VAC(L-N)			
Rate Freq.	50/60Hz			
Input PF	>0.99			
Current Distortion	THDI<3%(100%Linear load)			
Voltage Range	304-478VAC(L-L)full load;304-228VAC(L-L)power derate from 100%to 50%			
Freq.Range	40-70Hz			
Battery				
Rate voltage	±240VDC(adjustable for 30-50 sections)Optional480VDC(adjustable for 30-50 sections)			
Charging Capacity	20%*Pout			
Charging Accuracy	±1%			
Bypass				
Rate Voltage	380/400/415VAC(L-L);220/230/240VAC(L-N)			
Voltage Range	default -20%~+15%;upper limit:+10%,+15%,+20%,+25%;lower limit:-10%,-15%,-20%,-30%,-40%			
Overload	110%,long time operation;110%<load<125%,5 mins			
Inverter				
Rate Voltage	380/400/415VAC(L-L);220/230/240VAC(L-N)			
Rate Freq.	50/60Hz			
Output PF	1			
Voltage Accuracy	±1.0%			
Load Response	<5%(20%-80%-20%step load)			
Recovery Time	<20ms(0%-100%-0%step load)			
Output THDu	<1%(linear load),<5%(non-linear load according to IEC62040-3)			
Overload	110%,1hour;125%,10 mins;150%,1 min;>150%,200ms			
Frequency Accuracy	0.1%			
Synchronize Window	Settable,+0.5Hz-±5Hz,default+3Hz			
Slew Rate	Settable,0.5Hz/S-3Hz/S,default 0.5Hz/S			
Crest Factor	3:1			
Phase Accuracy	120°±0.5°			
System				
Efficiency	Normal Mode≥97%;Battery Mode≥97%			
Display	LED+10 inch touch LCD			
Certification-Safety	IEC62040-1,IEC60950-1			
Certification-EMS	IEC62040-2;IEC61000-4-2(ESD);IEC61000-4-3(RS);IEC61000-4-4(EFT);IEC61000-4-5(Surge)			
IP Degree	IP20			
Configuration	USB,RS232,RS485,Dry contact,Cold start,Air filter			
Option	SNMP card,Extended dry contact,Parallel kit,SPD,APPWIFI/Bluetooth,			
Environment	0-40℃(operation);-25~70(storage);0-95%(Humidity,non-condensing)			
Noise(dB)(1meter)	72dB@100%load,69dB @45%load			
Dimension				
Cabinet(W*D*H)mm	800*1000*2000		1200*1100*2000	
Module(W*D*H)mm	475*705*140			

PowerX

All-in-One PX Series Intelligent Power Distribution System for data center

Superior overload capacity
Superior overload capacity to make the power supply system more reliable.

User-friendly design
LCD liquid crystal display, which can display the working status and parameter information of UPS in real time, facilitating user management of UPS.

Grid friendly
Energy saving green power with high input power factor and low THDI.

Energy saving
Under normal use, the product will not cause harm to people and the environment.



Product Description

Coolnet Digital Energy Data Center All-in-one Intelligent Power Distribution System is based on the new intelligent modular UPS platform. It's a highly integrated modular power supply and distribution system for data centers, integrating UPS host, IT distribution, air-conditioning distribution (or without it as per the later description), lighting distribution, utility ATS, UPS input and output distribution into one cabinet. It features easy maintenance, high reliability and efficient land use, providing a safe, stable and pure green power supply for data center loads.

Main Feature

- Maximum support for 180kVA integrated UPS power supply and distribution
- Built in 30kVA/30kW module, with a height of only 2U
- The system capacity supports phased deployment, power module, bypass module can be quickly replaced, easy to maintain.
- UPS, UPS input and output cabinets, precision power distribution cabinets and 3 cabinets are integrated, saving about 68% of floor space and more than 55% of installation hours.
- System efficiency up to 96%, energy efficient
- Intelligent detection of distribution branch, full display of power supply link.

Model PX	150/25	180/30-I
Input		
Rated Voltage	380/400/415Vac, 50/60Hz, 3ph+N+PE	
Voltage Range	304-478VAC(L-L)full load;304-228VAC(L-L)power derate from 100%to 55%	
Frequency Range	40Hz~70Hz	
Power Factor(PF)	Full load>0.99,half load>0.98	
output		
Rated Voltage	380/400/415Vac, 50/60Hz, 3ph+N+PE	
Power Factor	1	
Maximum peak factor of	3:1	
System Parameter		
System Efficiency	96%(Linear load)	
Module Average Flow	≤2%	
Wiring Method	Default top inlet and top outlet, support bottom alignment	
AC lightning protection	Lightning protection class C	
Configuration Parameters		
Rated capacity	25-150kVA	30-180kVA
input method	MCCB or ATS	MCCB or ATS
Mains supply of ups	City Power:400A+UPS:3*250A	City Power:630A+UPS:3*400A
IT power distribution	40A*24*2	40A*24*2
Air conditioning	63A*8	63A*8
Lighting Power	10A*3	10A*3
Work Environment		
Operation Temperature	0~40℃	
Storage Temperature	-40~70℃(Battery not included)	
Relative Humidity	5~95%Non-condensing	
Altitudes	Start to refer to IEC62040-3 standard for frequency reduction above	
IP Degree	IP20	
Noise(dB)(1 meter)	The noise level is measured at ambient temperature of 25 degrees	
Dimension		
W*D*Hmm	600*1100/1200*2000	

Power Guard

PGH Series High Frequency online Tower UPS Single Phase In Single Phase Out

1~10KVA

Frequency Adaptive Systems

To meet the requirements of different electrical systems, it can be set Fixed or automatic recognition to suit 50Hz/60Hz.

Wide input voltage and frequency range

Wide input voltage & frequency range ensures stable mains operation in harsh power environments, reducing battery discharges and extending lifespan.

Energy saving

Under normal use, the product will not cause harm to people and the environment.

Active Input Power Factor Correction (PFC)

Active power factor correction via digital control achieves >0.99 input power factor to prevent grid pollution, save energy and cut system costs.

Zero Switch

The UPS will switch to battery mode when the mains power is normal. Zero time, which can effectively ensure the safety and reliability of the instrument.

DSP

DSP digital control technology

All power conversion links such as rectification, inverter, charging, and discharge are digitally controlled.



Product Description

CN-UT series is based on on-line double conversion technology, which is an ideal power supply solution for small-capacity scenarios, which can completely eliminate all kinds of power grid problems. Support tower installation, standard machine built-in battery.

Main Feature

- True double-conversion
- Microprocessor control optimizes reliability
- Input Power Factor Correction
- Output Power Factor 0.8
- Wide input voltage (110V-300 V)
- Efficient frequency conversion mode
- ECO mode for energy saving (Only available for 1-3KVA)
- Generator compatible
- The exquisite SNMP card can be perfectly monitored alone or together with USB and RS232
- Through the display simple operation control, and comprehensive display monitoring UPS status

Model PGH	1101TT(L)	1102TT(L)	1103TT(L)	1106TT(L)	1110TT(L)					
Capacity	1KVA/0.8 KW	2KVA/1.6KW	3KVA/2.4KW	6KVA/4.8KW	10KVA/8KW					
Input										
Connection Mode	Single phase with ground									
Nominal Voltage	200/208/220/230/240VAC			208/220/230/240VAC						
Voltage Range	110-300VAC at 50%load; 160-280 VAC at 100%load			110-300VAC at 50%load; 176-300 VAC at 100%load						
Frequency range	40Hz~70Hz			46~54 Hz/56~64 Hz						
Power factor	>0.8@100%load									
Output										
Output Voltage	200/208/220/230/240VAC			208/220/230/240VAC						
Voltage range(Battery mode)	±1%									
Frequency	SYN Correction Range	47~53 Hz/57~63 Hz			46~54 Hz/56~64Hz					
	Battery Model	50 Hz±0.25 Hz/60Hz±0.3 Hz			50 Hz/60Hz±0.1Hz					
Current Crest Ratio	3:01									
Harmonic Distortion	≤3%THD (Linear Load)			≤3%THD (Linear Load)						
	≤6%THD(Non-linear Load)			≤5%THD(Non-linear Load)						
Transfer Time	City Electricity/Battery	Zero			--					
	Inverter/Bypass	4 ms(Typical)			--					
Waveform(Batt.Mode)	Pure Sinewave									
Battery Type										
Battery Internal (Standard Unit)	Battery Type	12V/9AH/7AH								
	Quantity	2	3	4	6	16	20	16	20	
	Charging Current	1.0A(max.)				Preset:1.0A±10%,max.:2.0A±10%				
	Charging Voltage	27.4 VDC±1%	41.0 VDC±1%	54.7 VDC±1%	82.1 VDC±1%	218.4 VDC ±1%	273 VDC±1%	218.4 VDC±1%	273 VDC±1%	
Battery External (Long Back up Unit)	Battery Type	According to the actual application with a number of battery boxes								
	Quantity	2	3	4	6	6	8	16~20(Adjustable)		
	Charging Current	1A/2A/4A/6A(Adjustable)						1A/2A/4A/6A (Adjustable,6A is only available for 16pcs batteries)		
	Charging Voltage	27.4 VDC±1%	41.0 VDC±1%	54.7 VDC±1%	82.1 VDC±1%	82.1 VDC±1%	109.4 VDC±1%	218.4 VDC±1%	273 VDC ±1%	218.4 VDC±1%
Efficiency										
City Electricity Mode	88%		89%		90%		92%		93%	
Battery Mode	83%		87%		88%		90%		91%	
Display Interface										
LCD/LED	Load level, Battery level, AC mode, Battery mode, Bypass mode, and Fault indicators									
Alarm										
Battery Mode	Sounding every 4 seconds									
Low Battery	Sounding every second									
Overload	Sounding every second									
Fault	Continuously sounding									
Control Management										
Smart RS-232/USB	Supports Windows@2000/2003/XP/Vista/2008, Windows@7/8/10, Linux and MAC									
Optional SNMP	Support SNMP Internet Management									
Environment										
Relative Humidity	20-90%RH @0-40 °C(Non-condensing)				0-95%RH @0-40 °C(Non-condensing)					
Noise Level	<50dB @1M			<55dB @1M		<58dB@1M				
Physical										
Standard Unit	Dimension: W*D*H(mm)	145*282*220	145*397*220	145*397*220	190*421*318	190*369*688		190*442*688		
	Net Weight(kg)	8.7	11.5	15.7	24.6	61	74	66	76	
Long Backup	Dimension:	145*282*220		145*397*220		190*369*318		190*442*318		
	Net Weight(kg)	3.9	4.1	6.9	7.4	12		16		

Power Guard

PGH Series High Frequency online Tower UPS Single Phase In Single Phase Out

1~10KVA

Superior overload capacity
Superior overload capacity to make the power supply system more reliable.

User-friendly design
LCD liquid crystal display, which can display the working status and parameter information of UPS in real time, facilitating user management of UPS.

Grid friendly
Energy saving green power with high input power factor and low THDI.

Can be used with a generator
The wide range of input voltages and frequencies isolates the bad power generated by the generator to provide a pure, stable power supply to the load.



Main Feature

- True double-conversion
- Microprocessor control optimizes reliability
- Input power factor correction
- Output power factor 0.9
- Wide input voltage
- Converter mode available
- ECO mode for energy saving only available for 1-3KVA models
- Adjustable battery numbers
- Generator compatible
- Smart SNMP works well with either USB or RS-232 together
- Comprehensive display allows easy monitoring and access of UPS status

Optional sockets
Can be customized on demand

Europe Universal USA
British Australia South Africa

Model PGH	1101TT(L)	1102TT(L)	1103TT(L)	1106TT(L)	1110TT(L)	
Capacity	1KVA/0.9KW	2KVA/1.8KW	3KVA/2.7KW	6KVA/5.4W	10KVA/9KW	
Input						
Connection Mode	Single phase with ground					
Nominal Voltage	110/115/120/127VAC 208/220/230/240VAC			208/220/230/240VAC		
Voltage Range	60-145 VAC/120-300 VAC(Based on load at 50%) 90-145 VAC/180-300 VAC(Based on load at 100%)			110-300 VAC(Based on load at 50%) 176-300 VAC(Based on load at 100%)		
Frequency Range	40 Hz ~ 70 Hz			46-54 Hz/56-64 Hz		
Power Factor	>0.9@100%load					
Output						
Output Voltage	110/115/120/127VAC 208/220/230/240VAC			208/220/230/240VAC		
Voltage Regulation	±1%					
Frequency	SYN Correction Range	47-53 Hz/57 ~ 63 Hz			46-54 Hz/56-64 Hz	
	Battery Model	50 Hz/60Hz±0.5%			50 Hz/60Hz±0.1 Hz	
Current Crest Ratio	3:01					
Harmonic Distortion	≤3%THD (Linear Load)			≤3%THD(Linear Load)		
	≤6%THD(Non-linear Load)			≤5%THD(Non-linear Load)		
Transfer Time	City Electricity/Battery	Zero				
	Inverter/Bypass	4 ms(Typical)			Zero	
Waveform(Batt. Mode)	Pure Sinewave					
Battery Type						
Battery Internal (Standard Unit)	Battery Type	12V/9Ah		12V/9Ah		
	Quantity	2	3	4	6	16
	Typical Recharge Time	4 hours recover to 90%capacity			9 hours recover to 90%capacity	
	Charging Current	1A			1A/2A	
Battery External (Long Back up Unit)	Battery Type	Depending on applications				
	Quantity	3		6		
	Charging Current	1.0A/2.0A/4.0A/6.0 A			1A/2A/4A/6A(Adjustable,6A is only available for 16pcs batteries)	
	Charging Voltage	41.0 VDC±1%		82.1 VDC±1%		82.1 VDC±1% 273 VDC±1% (Based on 20pcs batteries)
Efficiency						
City Electricity Mode	88%	89%	90%	92%	93%	
Battery Mode	83%	87%	88%	90%	91%	
Display Interface						
LCD	Load level, Battery level, City Electricity Mode, Battery mode, Bypass mode, and Fault indicators					
Alarm						
Battery Mode	Sounding every 4 seconds					
Low Battery	Sounding every second					
Overload	Sounding twice every second					
Fault	Continuously sounding					
Control Management						
Smart RS-232/USB	Supports Windows2000/2003/XP/Vista/2008, Windows7/8/10, Linux and MAC					
Optional SNMP	Power management from SNMP manager and web browser					
Environment						
Relative Humidity	20-90 %RH@0-40°C (Non-condensing)			0-95%RH @0-50 °C (Non-condensing)		
Noise Level	<50dB @1M			<55dB@1M		
Physical						
Standard Unit	Dimension: W*D*H(mm)	145*282*220	145*397*220	190*421*318	190*369*688	190*442*688
	Net Weight(kg)	9.8	11.4	17	26.2	61
Long Back up	Dimension: W*D*H(mm)	145*282*220		145*397*220		190*369*318
	Net Weight(kg)	4.4		6.8		7.6

Power Guard

PGH Series High Frequency online Tower UPS Single Phase In Single Phase Out

1~3KVA



Load power factor of 0.9

Adapts to the characteristics of most current electrical equipment and increases the load carrying capacity of the machine.



Frequency Adaptive Systems

To meet the requirements of different electrical systems, it can be set Fixed or automatic recognition to suit 50Hz/60Hz.



Can be used with agenerator

The wide range of input voltages and frequencies isolates the bad power generated by the generator to provide a pure, stable power supply to the load.



Energy saving

Under normal use, the product will not cause harm to people and the environment.



Main Feature

- High efficiency: 92% for 1kva, 93% for 2kva, 94% for 3kva
- True double-conversion
- Microprocessor control optimizes reliability
- Input power factor correction 0.99
- Output power factor 1.0
- 50/60Hz frequency converter mode
- Wide input voltage (110V-300 V)
- ECO mode for energy saving
- Smart battery charger design to optimize battery performance
- Comprehensive display allows easy monitoring and access of UPS status
- SNMP/USB/RS-232 multiple communications
- Generator compatible

Applications

Government, Finance, IT, Education, Transportation, Broadcasting, Medical, Energy, etc.

Model PGH	1101TT	1102TT	1103TT
Phase	Single phase with ground		
Capacity	1KVA/1KW	2KVA/2KW	3KVA/3KW
Input			
Rate Voltage	200*/208*/220/230/240 VAC		
Voltage Range	110-300 VAC (Based on load at 50%); 160-300 VAC (Based on load at 100%)		
Frequency Range	40-70Hz		
Power Factor	≥0.99@nominal voltage(100%load)		
Harmonic Distortion (THDi)	≤5%@nominal voltage(100%load)		
Output			
Rated voltage	200*/208*/220/230/240 VAC		
Voltage range (Battery Mode)	±1%		
Frequency	SYN Correction Range	47~53 Hz or 57~63Hz	
	Battery Model	50 Hz±0.1Hz(60Hz±0.1Hz)	
Current Crest Ratio	3:1		
Harmonic Distortion	≤2%THD (Linear Load); ≤5%THD (Non-linear Load)		
Transfer Time	AC to DC	Zero	
	Inverter/Bypass	4 ms (Typical)	
	ECO to Battery mode	8ms (Typical), 10 ms (max)	
Waveform (Batt. Mode)	Pure Sinewave		
Battery/Charger			
Battery Type	12V/9Ah		
Quantity	2	4	6
Typical Recharge Time	4 hours recover to 90% capacity for internal battery		
Charging Current (CC)	1.5A		
Charging Voltage (FV)	27.4VDC±1%	54.8VDC±1%	82.2VDC±1%
Efficiency			
City Electricity Mode	96%	97%	97%
	92%	93%	94%
Battery Mode	86%	88%	91%
Display Interface			
LCD	Load level, Battery level, AC mode, Battery mode, Bypass mode, and Fault indicator Via LCD		
Control Management			
Smart RS-232/USB	Supports Windows 2000/2003/XP/Vista/2008, Windows 7/8/10, Linux and MAC		
Optional SNMP	Power management from SNMP manager and web browser		
Environment			
Humidity	20-90%RH@0-50°C (non-condensing)		
Noise Level	<50dB @1m with Fan speed control		
Standard			
EMC/Safety	CE (EMC: EN62040-2C2)		
Physical			
Dimension: W*D*H (mm)	145*282*220	145*397*220	190*421*318
Net Weight (kg)	9.8	17	26.2

Power Guard

PGH Series High Frequency online Tower UPS Single Phase In Single Phase Out 6~10KVA

Superior overload capacity
Superior overload capacity to make the power supply system more reliable.

User-friendly design
LCD liquid crystal display, which can display the working status and parameter information of UPS in real time, facilitating user management of UPS.

Grid friendly
Energy saving green power with high input power factor and low THDi.

Can be used with a generator
The wide range of input voltages and frequencies isolates the bad power generated by the generator to provide a pure, stable power supply to the load.



2.8" color touched LCD (option)

Main Feature

- Strong overload capability
- High efficiency up to 94%
- Built-in back-feed relay
- Built-in OVCD protection
- Large charger up to 8A for long run model
- Output power factor 1
- Wide input voltage range (110-300 VAC)
- Active input power factor correction 0.99
- 50Hz/60Hz frequency converter mode
- Emergency power off function (EPO)
- ECO mode for energy saving
- Generator compatible
- SNMP/USB/RS-232 communications
- Adjustable battery numbers
- Optional 2.8" color touched LCD

Model PGH	1106TT(L)	1110TT(L)			
Phase	1 phase in/1 phase out				
Capacity	6KVA/6KW	10KVA/10KW			
Input					
Rated Voltage	208/220/230/240 VAC				
Voltage Range	110~300VAC±3%at 50%load;176~300VAC±3%at 100%load				
Frequency Range	46~54 Hz or 56~64 Hz;40~70Hz (In generator mode)				
Power Factor	≥0.99@fullload				
Harmonic Distortion(THDi)	<4%@100%Load;<6%@50%Load				
Output					
Rated voltage	208/220/230/240 VAC				
Voltage range(Battery Mode)	±1%				
Frequency	SYN Correction Range	46~54 Hz or 56~64Hz			
	Battery Model	50 Hz±0.1Hzor60Hz±0.1Hz			
Current Crest Ratio	3:1(Max)				
Harmonic Distortion(THDv)	≤1%THD(linear load);≤4%THD(Non-linear load)				
Transfer Time	City Electricity /Battery	Zero			
	Inverter/Bypass	Zero			
Waveform(Batt.Mode)	Pure Sinewave				
Overload	City Electricity Mode	100-105%Continue,105-125%for 10			
	Battery Mode	100-110%3min, 110-130%for 0.5min, >130%immediately			
Battery Type					
Battery Internal (Standard Unit)	Battery Type	12V/7Ah	12V/9Ah		
	Quantity	16	20	16	20
	Typical Recharge Time	9hours recover to 90%capacity			
	Charging Current	1.0A			
Battery External (Long Back up Unit)	Charging Voltage	218.4 VDC±1%	240VDC±1%	218.4 VDC±1%	240VDC±1%
	Battery Type	Lead Acid			
	Quantity	16-20**			
	Charging Current	1A/2A/4A/6A/8A			
Charging Voltage	(13.65VDCx battery number)±1%				
Efficiency					
City Electricity Mode	94%				
Battery Mode	92%				
Display Interface					
LCD	UPS status,load capacity,battery capacity,input/output voltage, discharge time and fault indication				
Control Management					
Smart RS-232/USB	Supports Windows2000/2003/XP/Vista/2008,Windows7/8/10,Linux and MAC				
Optional SNMP	Power management from SNMP manager and web browser				
Environment					
Temperature and Humidity	20-95%RH @0-40°C (Non-condensing)				
Noise Level	<55dB@1m	<58dB @1m			
Physical					
Standard Unit	Dimension:	190*442*688		190*442*688	
	Net Weight(kg)	51.5	60.5	60	70
LongBackup	Dimension:	145*435*238			
	Net Weight(kg)	8.6		9.7	

Power Guard

PGH Series High Frequency online Tower UPS Three Phase In Single Phase Out 10~30KVA

Load power factor of 0.8

Adapts to the characteristics of most current electrical equipment and increases the load-carrying capacity of the machine.

Real time monitoring and alarm

Detect important parameters in real time, and immediately give an alarm if any abnormality is found.

Extended functions

Intelligent slots support expandable functions via IS-B, AS400, C-monitoring, SNMP, RS485, or EL environmental monitoring cards.

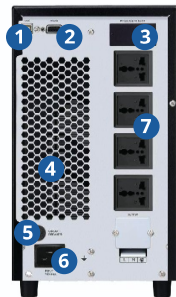
Energy saving

Under normal use, the product will not cause harm to people and the environment.



Main Feature

- True double-conversion
- Output power factor 0.8
- Wide input voltage(190V-520V)
- 50Hz Frequency converter mode
- ECO mode efficiency
- EPO Emergency Shutdown Button
- Generator compatible
- Charger capacity extended to 8A can run longer
- SNMP/USB/RS-232 communications
- Three stage charging design to optimize battery performance
- Optional maintenance bypass switch
- Compatible with single input



Back Panel

1. USB interface(Optional)
2. RS-232 interface
3. Smart expansion slots
4. Cooling holes
5. Input circuit breaker
6. Input socket
7. Output sockets

Applications

Government, Finance, IT, Education, Transportation, Broadcasting, Medical, Energy, etc.

Model PGH	3110TT(L)	3115TT(L)	3120TT(L)	3130TT(L)	
Capacity	10KVA/8KW	15KVA/12KW	20KVA/16KW	30KVA/24KW	
Input					
Connection Mode	Three-phase + four wire				
Nominal Voltage	3×400 VAC(3Ph+N)				
Voltage Range	190-520vac(3 phase)@50%load 305-520vac(3 phase)@100%load				
Frequency range	46-54 Hz/56-64Hz				
Output					
Output Voltage	208/220/230/240VAC				
Voltage range(Battery Mode)	±1%				
Frequency	46-54 Hz @50Hz system/56-64 Hz@60Hz system				
Current Crest Ratio	3:1(max.)				
Harmonic Distortion	≤3%THD(Linear Load)≤5%THD(Non-linear Load)				
Transfer Time	City Electricity/Battery	Zero			
	Inverter/Bypass	Zero			
Waveform(Batt.Mode)	Pure Sinewave				
Battery Type					
Battery Internal (Standard Unit)	Battery Type	12V/9AH			
	Quantity	16	20	16	20
	Typical Recharge Time	9 hours recover to 90%capacity			
	Charging Current	Preset 1A, 1A/2A/4A(Adjustable)			
Battery External (Long Back up Unit)	Battery Type	Depends on the applicant			
	Quantity	16	20	16	20
	Charging Current	Preset 4A, 1A/2A/4A(Adjustable)			
	Charging Voltage	218.4 VDC ±1%	273 VDC ±1%	218.4 VDC ±1%	273 VDC ±1%
Efficiency					
City Electricity Mode	91%		93%		
Battery Mode	91%		87%		
Display Interface					
LCD	System status, Load level, Battery level, AC mode, Battery mode, Bypass mode, input/output voltage, and Fault indication				
Alarm					
Battery Mode	Sounding every 4 seconds				
Low Battery	Sounding every second				
Overload	sound every 0.5 second				
Fault	Continuously sounding				
Control Management					
Smart RS-232/USB	Supports Windows@2000/2003/XP/Vista/2008, Windows7/8/10, Linux and MAC				
Optional SNMP	Power management from SNMP manager and web browser				
Environment					
Relative Humidity	0-95%RH @0-40°C(Non-condensing)				
Noise Level	<60dB @1M				
Physical					
Standard Unit	Dimension:W*D*H(mm)	190*442*688		190*575*688	
	Net Weight(kg)	66	76	67	78
Long Backup	Dimension:W*D*H(mm)	190*442*318		190*575*318	
	Net Weight (kg)	15	16	22	64

Power Guard

PGH Series High Frequency online Tower UPS Three Phase In Three Phase Out 10~20KVA

Superior overload capacity
Superior overload capacity to make the power supply system more reliable.

User-friendly design
LCD liquid crystal display, which can display the working status and parameter information of UPS in real time, facilitating user management of UPS.

Grid friendly
Energy saving green power with high input power factor and low THDI.

Can be used with generator
The wide range of input voltages and frequencies isolates the bad power generated by the generator to provide a pure, stable power supply to the load.

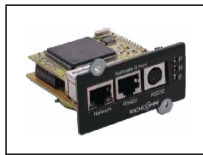


Main Feature

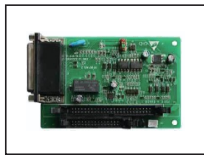
- True double conversion
- DSP technology for high performance
- Provides maintenance bypass
- Supports shared battery packs
- Output power factor 1.0
- Power step function
- Power factor correction available
- Optional parallel operation
- 50Hz/60Hz inverter mode
- ECO mode efficiency
- EPO Emergency Shutdown Button
- Generator compatible
- Optional isolation transformer
- SNMP/USB/RS-232 communications
- Threestage charging design
- Optimised battery performance
- Adjustable battery quantity
- Suitable for long time operation



USB card



Inbuilt SNMP card



Parallel card



Isolation Transformer

Model PGH	3310TT(L)	3315TT(L)	3320TT(L)	
Phase	Three-phase four-wire input/Three-phase four-wire output			
Capacity	10KVA/10KW	15KVA/15KW	20KVA/20KW	
Paralleling Capability	4			
Input				
Rate Voltage	3x380VAC(3ph+N+PE)			
Voltage Range	110-300 VAC@50%load;176-276 VAC@Load			
Frequency Range	40-70Hz			
Power Factor	>0.99@100%load			
Harmonic Distortion(THDI)	Linearload<3%			
Output				
Rated voltage	3x360*/380/400/415 VAC(3PH+N)			
Voltage range(Battery Mode)	±1%			
Frequency	SYN Correction Range	46-54Hz or 56-64Hz		
	Battery Model	50/60Hz±1%		
Current Crest Ratio	3:1(Max)			
Harmonic Distortion(THDv)	≤1%THD (Linear load);≤3%THD(Non-linear load)			
Transfer Time	City Electricity/Battery	Zero		
	Inverter/Bypass	Zero		
Waveform(Batt.Mode)	Pure Sinewave			
Overload capacity	100-110%60 minutes,111-125%10 minutes,126%-150%1minute;>150%for 400ms			
Battery Type				
Battery Internal (Standard Unit)	Battery Type	12V/9Ah	12V/9Ah	12V/9Ah
	Quantity	(10+10)	(16+16)	(16+16)
	Typical Recharge Time	9 hours recover to 90%capacity		
	Charging Current	1A-12A(Adjustable)		
	Charging Voltage	±136.5 VDC	±218 VDC	
Battery External (Long Back up Unit)	Battery Type	Multiple battery boxes according to actual application		
	Quantity	16-32(optional);32-4(Optional)	20-32(optional);32-40(Optional)	
	Charging Current	1A-12A(Adjustable)		
	Charging Voltage	±13.65V×N(N=16-20)		
Bypass				
Rated Voltage	3x380/400/415 VAC(3PH+N)			
Voltage Range	-30%~+20%(Adjustable)			
Frequency Range(Synchronized Range)	46-54Hz or 56-64Hz			
Overload Capacity	>130%1minutes (default value),continue to work until the circuit breaker is protected			
Efficiency				
City Electricity Mode	96%			
ECO Mode	99%			
Battery Mode	96%			
Display Interface				
LCD	UPS status,load capacity,battery capacity,input/output voltage, discharge time and fault indication			
Control Management				
Smart RS-232/USB	Supports Windows2000/2003/XP/Vista/2008,Windows7/8/10,Linux and MAC			
Optional SNMP	Power management from SNMP manager and web browser			
Environment				
Temperature and Humidity	0-40°C;0-95%relative humidity(non condensing)			
Altitude**	0-1500m under full load			
Noise Level	<60dB @1m			
Physical				
Standard Unit	Dimension:W*D*H(mm)	250*630*827		
	Net Weight(kg)	93	125	
Long Backup Unit	Dimension:W*D*H(mm)	250*630*827		
	Net Weight(kg)	37	40	

Power Guard

PGH Series High Frequency online Tower UPS Three Phase In Three Phase Out

30~60KVA



Load power factor of 0.9

Adapts to the characteristics of most current electrical equipment and increases the load carrying capacity of the machine.



Active Input Power Factor Correction (PFC)

Active power factor correction via digital control achieves ≥ 0.99 input power factor to prevent grid pollution, save energy and cut system costs.



Superior overload capacity

Superior overload capacity to make the power supply system more reliable.

DSP

DSP digital control technology

All power conversion links such as rectification, inverter, charging, and discharge are digitally controlled.



Main Feature

- True double conversion
- DSP technology for high performance
- Provides maintenance bypass
- Supports shared battery packs
- Output power factor 1.0
- Power step function
- Power factor correction available
- Optional parallel operation
- 50Hz/60Hz inverter mode
- Energy Conservation Operating Mode (ECO)
- Emergency shutdown function (EPO)
- Generator support
- Optional isolation transformer (10K-80K)
- SNMP+USB+RS-232 multiple communication
- Three-stage charging design
- Optimised battery performance
- Adjustable battery quantity
- Suitable for long time operation

Applications

Government, Finance, IT, Education, Transportation, Broadcasting, Medical, Energy, etc.

Model PGH	3330TT(L)	3340TT(L)	3360TT(L)	
Phase	Three in and three out			
Capacity	30KVA/30KW	40KVA/40KW	60KVA/60KW	
Paralleling Capability	4			
Input				
Rate Voltage	3x380/400/415 VAC(3PH+N)			
Voltage Range	110-300 VAC@50%load;176-276 VAC@Load			
Frequency Range	40-70Hz			
Power Factor	$>0.99@100\%load$			
Harmonic Distortion(THDi)	Linear load $<4\%$			
Output				
Rated voltage	3x360*/380/400/415 VAC(3PH+N)			
Voltage range(Battery Mode)	$\pm 1\%$			
Frequency	SYN Correction Range	46-54Hz or 56-64Hz		
	Battery Model	50/60Hz $\pm 1\%$		
Current Crest Ratio	3:1(Max)			
Harmonic Distortion(THDv)	$\leq 2\%THD$ (linear load); $\leq 5\%THD$ (Non-linear load)			
Transfer Time	City Electricity/Battery	Zero		
	Inverter/Bypass	Zero		
Waveform(Batt.Mode)	Pure Sinewave			
Overload capacity	100-110%60 minutes,111-125%10 minutes,126%-150%1minute; $>150\%$ for 400ms			
Battery Type				
Battery Internal (Standard Unit)	Battery Type	12V/7Ah	12V/9Ah	—
	Quantity	(16+16)*2	(16+16)*2	
	Charging Current	2A		
	Charging Voltage	+/-13.65 VDC* $N \pm 1\%$ (N=16-20)		
Battery External (Long Back up Unit)	Battery Type	Multiple battery boxes according to actual application		
	Quantity	30-40(Optional)		
	Charging Current	1A-12A(Adjustable)	1A-20A(Adjustable)	
	Charging Voltage	$\pm 13.65V \times N$ (N=16-20)		
Bypass				
Rated Voltage	3x380/400/415 VAC(3PH+N)			
Voltage Range	305VAC-457VAC			
Frequency Range(Synchronized Range)	46-54Hz or 56-64Hz			
Overload Capacity	$>130\%$ 1minutes (default value),continue to work until the circuit breaker is protected (optional)			
Efficiency				
City Electricity Mode	95.5%			
ECO Mode	98.5%			
Battery Mode	94.5%			
Display Interface				
LCD	UPS status,load capacity,battery capacity,input/output voltage, discharge time and fault indication			
Control Management				
Smart RS-232/USB	Supports Windows2000/2003/XP/Vista/2008,Windows7/8/10,Linux and MAC			
Optional SNMP	Power management from SNMP manager and web browser			
Environment				
Temperature and Humidity	0-40°C;0-95%relative humidity(Non condensing)			
Altitude**	0-1000m under full load			
Noise Level	$<65dB@1m$	$<70dB @1m$	$<70dB@1m$	
Physical				
Standard Unit	Dimension:W*D*H(mm)	300*815*1000	300*815*1000	—
	Net Weight(kg)	207	233	
Long Backup Unit	Dimension:W*D*H(mm)	300*815*1000	300*815*1000	300*815*1000
	Net Weight(kg)	55	56	74

Power Guard

PGH Series High Frequency online Tower UPS Three Phase In Three Phase Out 80~200KVA

Superior overload capacity
Superior overload capacity to make the power supply system more reliable.

Frequency Adaptive Systems
To meet the requirements of different electrical systems, it can be set Fixed or automatic recognition to suit 50Hz/60Hz.

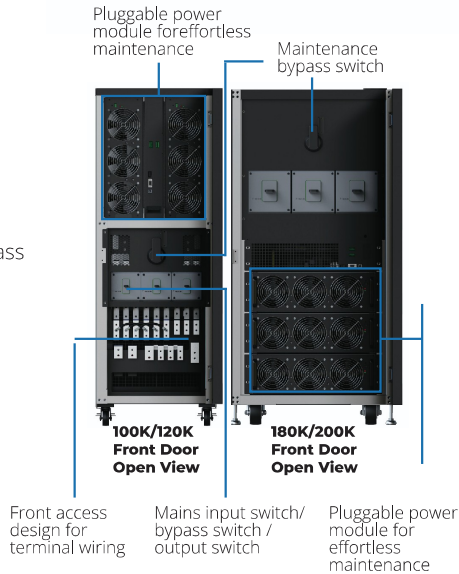
Grid friendly
Energy saving green power with high input power factor and low THDi.

Can be used with a generator
The wide range of input voltages and frequencies isolates the bad power generated by the generator to provide a pure, stable power supply to the load.



Main Feature

- Pluggable power module design with front access to decrease MTTR, parallel redundancy capability for power guarantee
- Parallel operation with common battery
- Power walk-in function
- Dual-mains inputs
- Built-in 4 switches including Mains input, by pass input, output and maintenance by pass switch
- Flexible battery configuration and adjustable charging current
- Output power factor 1
- Active power factor correction in all
- Phases Built-in 7" touch LCD screen for comprehensive information
- Emergency power off function(EPO)
- Generator compatible
- 50Hz/60Hz frequency converter mode



Model PGH	3380TT(L)	33100TT(L)	33120TT(L)	33180TT(L)	33200TT(L)
Phase	3-phase in/3-phase out				
Capacity	80KVA/80KW	100KVA/100KW	120KVA/120KW	180KVA/180KW	200KVA/200KW
Battery Type	External Battery				
Paralleling Capability	4				
Input					
Rate Voltage	3x380/400/415 VAC(3PH+N)				
Voltage Range	110-300 VAC@50%load;176-276 VAC@Load				
Nominal Frequency	50/60Hz(Auto sensing)				
Frequency Range	40-70Hz				
Power Factor	>0.99@100%load				
Harmonic Distortion (THDi)	100%load<4%				
Output					
Rated voltage	3x380/400/415 VAC(3PH+N)				
Voltage Regulation(Steady state)	≤±1%Typical(Balanced load) ≤±2%Typical(Unbalanced load)				
Nominal Frequency	50/60Hz				
Frequency Range(Synchronized range)	46Hz~54Hz or 56Hz~64Hz				
Overload Capability	≤110%for 1 hour,111%~125%for 10 mins,126%~150%for 1min and>150%for 200ms				
Harmonic Distortion	≤2%THD(Linear Load),4%THD(Non-linear Load)				
Battery/Charger					
Rate Voltage	+/-192V~+/-240V(Optional)				
Maximum Voltage	+/-240V(12Vx40 Pcs)				
Minimum Voltage	+/-192V(12Vx32Pcs)				
Floating Charge Voltage	2.28V/Cell (2.25~2.33Optional)				
Boost Charging Voltage	2.35V/Cell				
Temperature Compensation	Support				
Maximum Charging Current (Per Power Module)	24A(Adjustable)	36A(Adjustable)	54A(Adjustable)	54A(Adjustable)	
Bypass					
Rated Voltage	3x380/400/415 VAC(3Ph+N)				
Voltage Range	-30%~+20%				
Frequency Range(Synchronized range)	46Hz~54Hz or 56Hz~64Hz				
Overload Capability	≤110%for 1 hour,111%~125%for 10 mins,126%~150%for 1 min and>150%for 200ms				
Efficiency					
City Electricity Mode	95.5%				
ECO Mode	98.5%				
Battery Mode	94.5%				
Control Management					
Smart RS-232/USB	Supports Windows2000/2003/XP/Vista/2008,Windows7/8/10, Linux and MAC				
Optional SNMP	Power management from SNMP manager and web browser				
Environment					
Operating Temperature	0-40°C				
Operating Humidity	<95%(Non condensing)				
Altitude**	<1000m for Nominal power				
Standard					
Safety	IEC/EN 62040-1				
EMC	IEC/EN62040-2 Category C3				
Physical					
IP Class	IP20				
Dimension:W*D*H(mm)	430*1000*1200	430*1000*120	430*1000*1200	600*1000*1200	600*1000*1200
Net Weight(kg)	200	200	200	265	265

Power Guard

PGH Series High Frequency online Tower UPS Three Phase In Three Phase Out

300~600KVA



Extremely wide input voltage and frequency range

The UPS will switch to battery mode when the mains power is normal Zero time, which can effectively ensure the safety and reliability of the instrument.



Wide range of options

Dust-proof grid, SNMP network communication card, lightning protection module, battery temperature compensator, cell phone SMS alarm.



Intelligent system self-diagnosis

Extensive fault logging, large history storage space, suit 50Hz/60Hz.

DSP

DSP digital control technology

All power conversion links such as rectification, inverter, charging and discharge are digitally controlled.



Main Feature

- Support 380/400/415V, 50/60Hz power grid system, to provide the ideal power supply quality and load protection
- High performance and efficiency, input PF > 0.99, THDi < 3%, efficiency > 96%
- Full DSP control, flexible and robust digital control for rectifier, inverter and battery management.
- Wide range of voltage and frequency, adapt to different grid and generator input.
- Friendly human-machine interface, equipped with a large LCD touch screen and control keyboard, rich in information.
- All fans in the system are designed with a few spare parts, which greatly improves the reliability of the system.
- Intelligent battery management programme, support for the configuration of large-capacity charging module;
- Top/bottom cable entry, flexible for different field installation.

Model PGH	33300TTL	33400LTTL	33500TTL	33600TTL
Rate Power	300KVA	400KVA	500KVA	600KVA
Main input				
Input	3P5W(3P+N+PE)			
Rate Voltage	380/400/415VAC(L-L); 220/230/240VAC(L-N)			
Rate Freq.	50/60Hz			
Input PF	>0.99			
Current Distortion	THDi < 3% (100% Linear load)			
Voltage Range	304~478VAC(L-L) full load; 304~228VAC(L-L) power derate from 100% to 75%			
Freq. Range	40~70Hz			
Battery				
Rate voltage	±240VDC			
Charging Capacity	20% * Pout			
Charging Accuracy	±1%			
Bypass				
Rate Voltage	380/400/415VAC(L-L); 220/230/240VAC(L-N)			
Voltage Range	50/60Hz			
Overload	110% long time operation; 110% < load < 125%, 5mins 125% < load < 150%, 1min; > 150%, 1 second			
Inverter				
Rate Voltage	380/400/415VAC(L-L); 220/230/240VAC(L-N)			
Rate Freq.	50/60Hz			
Output PF	1			
Voltage Accuracy	±1.0%			
Load Response	< 5% (20% - 80% - 20% step load)			
Recovery Time	< 20ms (0% - 100% - 0% step load)			
Output THDu	< 1% (linear load), < 5% (non-linear load according to IEC62040-3)			
Overload	110%, 1hour; 125%, 10 mins; 150%, 1 min; > 150%, 200ms			
Frequency Accuracy	0.1%			
Synchronize Window	Settable, ±0.5Hz ~ ±5Hz, default ±3Hz			
Slew Rate	Settable, 0.5Hz/S ~ 3Hz/S, default 0.5Hz/S			
Crest Factor	3:1			
Phase Accuracy	120° ± 0.5°			
System				
Efficiency	Normal Mode ≥ 96%; Battery Mode ≥ 96%			
Display	LED + 10inch touch LCD			
Certification-Safety	IEC62040-1, IEC60950-1			
Certification-EMS	IEC62040-2; IEC61000-4-2(ESD); IEC61000-4-3(RS); IEC61000-4-4(EFT); IEC61000-4-5(Surge)			
IP Degree	IP20			
Configuration	USB, RS232, RS485, Dry contact, Cold start, Air filter			
Option	SNMP card, AS400 card, Parallel kit, SPD, LBS			
Environment	0-40°C (operation); -25°C ~ 70°C (storage); 0-95% (Humidity, non-condensing)			
Noise(dB)(1meter)	72dB @ 100% load, 69dB @ 45% load			
Dimension				
W*D*H(mm)	600*1000*2000			1200*1100*2000

Power Guard

PGH Series High Frequency online Tower UPS Three Phase In Three Phase Out 1000~2000KVA

Modular design
When the power unit fails, the unit can be removed and used again at a reduced rate.

User-friendly design
LCD liquid crystal display, which can display the working status and parameter information of UPS in real time, facilitating user management of UPS;

Inward power factor up to 0.99
The incoming harmonic current is less than 3% and the efficiency of the machine is 95%, making it environmentally friendly and energy efficient.

3P/3P Online double conversion
Supports 380/400/415V, 50/60Hz grid system, providing ideal power quality and load protection.



Main Feature

- Full DSP control, flexible and robust digital control for rectifier, inverter and battery management.
- System level+veneer level+device level comprehensive protection, extreme reliability, stronger environmental adaptability
- Extra-large 10-inch LCD touch screen, colourful graphic display, easy to operate, friendly man-machine interface
- Intelligent system self-diagnostic programme, rich fault records, large-capacity historical records storage space
- Maximum capacity of 2MW, the best choice for uninterruptible power supply in ultra-large data centres.



Applications

Government, Finance, IT, Education, Transportation, Broadcasting, Medical, Energy, etc.

Model PGH	331000TTL	331500TTL	332000TTL
Rate Power	1000KVA/1000kW	1500KVA/1500kW	2000KVA/2000kW
Main input			
Input	3P+N+PE		
Rate Voltage	380/400/415VAC(L-L);220/230/240VAC(L-N)		
Rate Freq.	50/60Hz		
Input PF	>0.99		
Current Distortion	THDi<3%(100%Linear load)		
Voltage Range	304~478VAC(L-L)full load;304~228VAC(L-L)power derate from 100%to 75%		
Freq.Range	40~70Hz		
Battery			
Rate voltage	±240VDC(32-44 sections settable)		
Charging Capacity	20%*Pout		
Charging Accuracy	±1%		
Bypass			
Rate Voltage	380/400/415VAC(L-L);220/230/240VAC(L-N)		
Voltage Range	Adjustable voltage, default -20%~+15%; upper limit: +10%, +15%, +20%, +25%; lower limit: -10%, -15%, -20%, -30%, -40%		
Overload	110%, long time operation; 101%<load<125%, 5 mins 125%<load<150%, 1 min; >150%, 1 second		
Inverter			
Rate Voltage	380/400/415VAC(L-L);220/230/240VAC(L-N)		
Rate Freq.	50/60Hz		
Output PF	1		
Voltage Accuracy	±1.0%		
Load Response	<5%(20%-80%-20%step load)		
Recovery Time	<20ms(0%-100%-0%step load)		
Output THDu	<1%(Linear load), <5%(Non-linear load)		
Overload	110%, 1 hour; 125%, 10 mins; 150%, 1 min; >150%, 200ms		
Frequency Accuracy	0.1%		
Synchronize Window	Settable, ±0.5Hz~±5Hz, default ±3Hz		
Slew Rate	Settable, 0.5Hz/5~3Hz/5, default 0.5Hz/5		
Crest Factor	3:1		
Phase Accuracy	120°±0.5°		
System			
Efficiency	Normal Mode≥97%; Battery Mode≥97%		
Display	LED+10inch touch LCD		
Certification-Safety	IEC62040-1, IEC60950-1		
Certification-EMS	IEC62040-2; IEC61000-4-2(ESD); IEC61000-4-3(RS); IEC61000-4-4(EFT); IEC61000-4-5(Surge)		
IP Degree	IP20		
Configuration	USB, RS232, RS485, Dry contact, Cold start, Air filter		
Option	SNMP card, AS400 card, Parallel kit, SPD, LBS		
Environment	0-40°C (operation); -25°C~70°C (storage); 0-95% (Humidity, non-condensing)		
Noise(dB)(1meter)	72dB@100%load, 69dB @45%load		
Dimension			
W*D*H(mm)	2000*1100*2000	2800*1100*2000	3400*1100*2000

Power Guard

PGH Series High Frequency online Rack UPS Single Phase In Single Phase Out

1~10KVA



Double conversion pureonline type
Intelligent slots support expandable functions via IS-B, AS400, c-monitoring, SNMP, RS485 and EI environmental monitoring cards.

Real time monitoring and alarm
Detect important parameters in real time, and immediately give an alarm if any abnormality is found.

Energy saving
Under normal use, the product will not cause harm to people and the environment.

Can be used with a generator
The wide range of input voltages and frequencies isolates the bad power generated by the generator to provide a pure, stable power supply to the load.

Product Description

Coolnet CN-UR series rack type UPS is the double transformation on-line technology, support more than 3 sets parallel work, and support the function of sharing battery pack when in parallel mode; online UPS can provide the optimal power environment for the load. Regardless of voltage accuracy, input noise filtering, zero switching time and compatible with the standard terms of service cabinet, Rack UPS is the best choice.

Main Feature

- True double-conversion
- Microprocessor control optimizes reliability
- Output power factor correction
- Wide input voltage range (110-300VAC)
- Converter mode available
- ECO mode for energy saving only available for 1-3KVA models
- Generator compatible
- Adjustable charging current via LCD or software (1A-6A)
- Emergency power off function (EPO) only available for 6K/10K models
- Comprehensive display allows easy monitoring access of UPS status



Model PGH	1101RT(L)	1102RT(L)	1103RT(L)	1106RT(L)	1110RT(L)	
Capacity	1kVA/0.8kW	2kVA/1.6kW	3kVA/2.4kW	6kVA/4.8kW	10kVA/8kW	
Input						
Connection Mode	Single Phase +Ground					
Input Voltage	200/208/220/230/240Vac					
Voltage Range	110-300Vac					
Frequency Range	40-70Hz					
Power Factor	0.8					
Output						
Output Voltage	200/208/220/230/240Vac					
Voltage Regulation	±1%					
Frequency	SYN Correction range	46-54Hz/56-64Hz				
	Battery Model	50 Hz±0.1Hz/60Hz±0.1Hz				
Distortion (THDU)	≤3%					
Peak Coefficient	≥3:1					
Overload Capacity	110%, convey to bypass after 1h; 125%, convey to bypass after 10 min; 150%, convey to bypass					
Transfer Time	City power/Battery	0ms				
	Inverter/Bypass	≤4ms(standard environment)			0ms	
Battery Type						
Battery Internal	Quantity	2	4	6	/	
	Charging Current	1.0A(Max)				
	Battery Model	12V 9AH				
Battery External	Quantity	3	6	8	16(16-20 optional)	
	Charging Current	1A/2A/4A/6A settable				
	Battery Model	Depends on the applicant				
Efficiency						
City Electricity Mode	≥91%			≥93%		
Battery Mode	≥91%			≥93%		
Display Interface						
LCD/LED	Loading Size, Battery Capacity, City Electricity Mode, Battery Mode, Bypass Mode, Fault Indication					
Control Management						
Smart RS-232/USB	Supports Windows®2000/2003/XP/Vista/2008, Windows 7/8/10, Linux and MAC					
Optional SNMP	Support SNMP Internet Management					
Environment						
Temperature	0-40℃					
Relative Humidity	0-95%(Non Condensing)					
Noise Level	<50dB@1m		<55dB@1m		<58dB@1m	
Physical						
Standard Unit	Dimension:	438*310*88	438*410*88	438*630*88	/	/
	Net Weight(kg)	12	18	29	/	/
Long Backup Unit	Dimension:	438*310*88	438*410*88	438*530*88	438*530*133	
	Net Weight(kg)	5	7	8	12	16

Power Guard

PGH Series High Frequency online Rack UPS Single Phase In Single Phase Out

1~10KVA

Superior overload capacity

Superior overload capacity to make the power supply system more reliable.

User-friendly design

LCD liquid crystal display, which can display the working status and parameter information of UPS in real time, facilitating user management of UPS.

Load power factor of 0.9

Adapts to the characteristics of most current electrical equipment and increases the load-carrying capacity of the machine.

Can be used with a generator

The wide range of input voltages and frequencies isolates the bad power generated by the generator to provide a pure, stable power supply to the load.



Main Feature

- True double-conversion
- Microprocessor control optimizes reliability
- Input power factor correction
- Output power factor 0.9
- Wide input voltage range
- Converter mode available
- ECO mode for energy saving only available for 1-3K models
- Generator compatible
- Adjustable charging current via LCD or software(1A-6A)
- Emergency power off function(EPO)only available for 6K/10K models
- Comprehensive display allows easy monitoring access of UPS status

Applications

Mainly used in large IDC rooms, bank/securities settlement center, communication network management center, semiconductor product lines and large automation production and its control system. According to the special needs of users was improved, and used in large sports venues, conference room, theater and highway and railway tunnels metal halide lamp lighting system.

Model PGH	1101RT(L)	1102RT(L)	1103RT(L)	1106RT(L)	1110RT(L)				
Capacity	1KVA/0.9KW	2KVA/1.8KW	3KVA/2.7KW	6KVA/5.4KW	1KVA/9KW				
Input									
Connection Mode	Single Phase+Ground								
Nominal Voltage	110/115/120/127VAC or 208/220/230/240VAC			208/220/230/240VAC					
Input Voltage	60-145 VAC or 120-300 VAC(Based on load at 50%) 90-145 VAC or 180-300 VAC(Based on load at 100%)			110-300 VAC(Based on load at 50%) 176-300 VAC(Based on load at 100%)					
Frequency Range	40 Hz~70 Hz			46~54 Hz or 56~64Hz					
Power Factor	0.9								
Output									
Output Voltage	110/115/120/127VAC or 208/220/230/240VAC			208/220/230/240VAC					
Voltage Regulation	±1%								
Frequency	SYN Correction range	47~53 Hz or 57~63 Hz		46Hz~54 Hz or 56Hz~64 Hz					
	Battery Model	50 Hz or 60Hz±0.5%		50 Hz±0.1 Hz or 60 Hz±0.1 Hz					
Current Crest Ratio	3:1								
Harmonic Distortion	3%THD(Linear Load) 6%THD(Non-linear Load)			3%THD(Linear Load) 5%THD(Non-linear Load)					
Transfer Time	City power/Battery	Zero		0ms					
	Inverter/Bypass	4 ms(Typical)		0ms					
Waveform(Batt.Mode)	Pure Sinewave								
Battery Type									
Battery Internal	Battery Type	12V/9 Ah	12V/9 Ah	12V/9Ah	12V/9 Ah				
	Quantity	2	3	4	6	16	20	16	20
	Typical Recharge Time	4 hours recover to 90%capacity				9 hours recover to 90%capacity			
	Charging	1A				1A/2A (Adjustable)			
Battery External	Charging Voltage	27.4VDC±1%	41.0VDC±1%	54.7 VDC±1%	82.1VDC±1%	218.4 VDC±1%	273VDC ±1%	218.4 VDC±1%	273VDC ±1%
	Battery Type	Depending on applications							
	Quantity	3			6	6	16~20(Adjustable)		
Charging Current(max.)	1.0A/2.0A/4.0A/6.0A				1A/2A/4A/6A(Adjustable,6A is only available for 16 pcs batteries)				
	Charging Voltage	41.0 VDC±1%	82.1VDC±1%	82.1 VDC±1%	82.1 VDC±1%	218.4 VDC±1%(Based on 16pcs batteries)			
Efficiency Depends on the applicant									
City Electricity Mode	88%	89%	90%	92%	90%				
Battery Mode	83%	87%	88%	90%	91%				
Display Interface									
LCD	Loading Size, Battery Capacity, City Electricity Mode, Battery Mode, Bypass Mode, Fault Indication								
Control Management									
Smart RS-232/USB	Supports Windows@2000/2003/XP/Vista/2008, Windows 7/8/10, Linux and MAC								
Optional SNMP	Support SNMP Internet Management								
Environment									
Relative Humidity	20-90%RH @0-40°C (Non-condensing)				0-95%RH @0-40°C (non-condensing)				
Noise Level	<50dB@1m				<55dB@1m				
Physical									
Standard Unit		438*310*88	438*410*88	438*630*88	UPS Unit:438*500*88 [2U] Battery Pack: 438*580*133[3U]	UPS Unit:438*500*88[2U] Battery Pack: 438*580*133[3U]	UPS Unit: 438*580*133[3U] Battery Pack: 438*580*133[3U]		
	Net Weight(kg)	12	14.1	19	29.3	UPS Unit:15 Battery Pack:48	UPS Unit: 15 Battery Pack:61	UPS Unit: 18 Battery Pack:51	UPS Unit: 18 Battery Pack:61
Long Backup Unit	Dimension:W*D*H (mm)	438*310*88	438*410*88	438*460*88	438*500*88[2U]	438*580*133[3U]			
	Net Weight(kg)	9	12	14.2	15	18			

Power Guard

PGH Series High Frequency online Rack UPS Single Phase In Single Phase Out

1~3KVA

Superior overload capacity
Superior overload capacity to make the power supply system more reliable.

User-friendly design
LCD liquid crystal display, which can display the working status and parameter information of UPS in real time, facilitating user management of UPS.

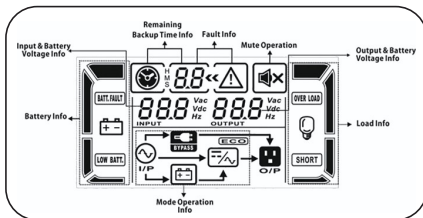
Grid friendly
Energy saving, green power with high input power factor and low THDi.

Energy saving
Under normal use, the product will not cause harm to people and the environment.



Main Feature

- True double-conversion
- Output power factor 1
- Output voltage regulation < 1%
- Higher output crest ratio 3:1
- 50Hz/60Hz frequency converter mode
- Programmable power management outlets
- Emergency power off function (EPO)
- Hot swappable battery design
- ECO mode energy saving
- Emergency power off (EPO) function
- Provides over voltage Provides over voltage cutt-off protection and surge immunity by MOV for full time equipment protection
- High power factor charger upto 1000W capacity with very low ripple current when charging battery
- Low input THDi to reduce power system pollution
- Adjustable charging current via LCD panel



Model PGH	1101RT	1102RT	1103RT			
Capacity	1KVA/1KW	2KVA/2KW	3KVA/3KW			
Phase	Single phase with ground					
Input						
Nominal Voltage	100/110/115/120/127 VAC or 200/208/220/230/240 VAC					
Voltage Range	55-150 VAC±5%or110-300 VAC±5%@50%load;80-150 VAC±5%or160-300 VAC±5%@100%load					
Frequency Range	40~70HZ					
Power Factor	≥0.99 @nominal voltage(100%load)					
Harmonic Distortion(THDi)	≤5%@nominal input voltage					
Output						
Output Voltage	100*/110*/115*/120/127 VAC or 200*/208*/220/230/240 VAC					
Voltage Regulation	±1%					
Frequency	SYN Correction Range	57~63 Hz or 47~53Hz				
	Battery Model	60Hz±0.1Hz or 50 Hz±0.1Hz				
Current Crest Ratio	3:1(max.)					
Harmonic Distortion	≤2%THD(Linear Load);≤4%THD(Non-linear Load)					
Transfer Time	City power/Battery	0ms				
	Inverter/Bypass	4 ms(Typical)				
Waveform(Batt.Mode)	Pure sine wave					
Battery Type						
Battery Type	12V/9Ah	12V/7 Ah	12V/9Ah	12V/7 Ah	12V/9 Ah	
Numbers	2	3	4	6	4	
Typical Recharge Time	3 hours recover to 95%capacity for internal battery@2A charging current					
Charging Current(max.)	100/110/115/120/127 VAC models:default 2A,max.8A adjustable 200/208/220/230/240 VAC models:default 2A,max.12A adjustable					
Charging Voltage	27.4VDC±1%	41.1VDC±1%	54.8VDC±1%	82.1VDC±1%	82.1VDC±1%	
Efficiency						
City Electricity Mode	≥89%@full charged battery		≥91%@full charged battery			
ECO Mode	≥96%@full charged battery					
Battery mode	≥88%		≥90%			
Control Management						
Smart RS-232/USB	Supports Windows@2000/2003/XP/Vista/2008,Windows@7/8/10,Linux and MAC					
Optional SNMP	Power management from SNMPmanager and web browser					
Environment						
Relative Humidity	20-90%RH @0-40℃(non-condensing)					
Noise Level	<50dB@1m					
Altitude	10%de-rating for over 1000m(The altitude should not exceed 3000m)					
Physical						
Dimension:W*D*H(mm)	438*410*88		438*510*88		438*630*88	
Net Weight(kg)	Without Battery	6.6	7.8	9.6	10.6	12.4
	W/Built-int Battery	11.6	14.1	19.5	23.3	27.5

Power Guard

PGH Series High Frequency online Rack UPS Single Phase In Single Phase Out 6~10KVA



Zero Switch

The UPS will switch to battery mode when the mains power is normal Zero time, which can effectively ensure the safety and reliability of the instrument.



User-friendly design

LCD liquid crystal display, which can display the working status and parameter information of UPS in real time, facilitating user management of UPS.



DSP

DSP digital control technology

All power conversion links such as rectification, inverter, charging, and discharge are digitally controlled.

Can be used with a generator

The wide range of input voltages and frequencies isolates the bad power generated by the generator to provide a pure, stable power supply to the load.



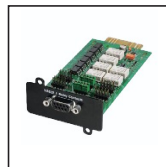
Main Feature

- True double-conversion
- DSP technology guarantees high performance
- Output power factor 1
- Optional N+X parallel redundancy
- Wide input voltage range (110-300 VAC)
- Active input power factor correction 0.99
- 50Hz/60Hz frequency converter mode
- Emergency power off function (EPO)
- Generator compatible
- SNMP/USB/RS-232 communications
- Adjustable battery numbers
- Optional N+X parallel redundancy

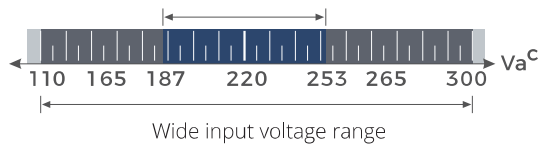
Accessory



SNMP Card



Relay Card



Model PGH	1106RT(L)	1110RT(L)			
Capacity	6KVA/6KW	10KVA/10KW			
Phase	1 phase in/1 phase out				
Input					
Nominal Voltage	208/220/230/240 VAC				
Voltage Range	110~300VAC±3%at 50%load;176~300VAC±3%at 100%load				
Frequency Range	46-54 Hz±0.50 Hz/56-64 Hz±0.60 Hz				
Power Factor	≥0.99@full load				
THDI	<4%@100%Load,<6%@50%Load				
Output					
Output Voltage	208*/220/230/240 VAC				
Voltage Regulation	±1%				
Frequency	SYN Correction range	46-54 Hz±0.50 Hz/56-64 Hz±0.60 Hz			
	Battery Model	50Hz±0.1Hz or 60Hz±0.1Hz			
Current Crest Ratio	3:1(max.)				
Harmonic Distortion	≤1%THD (Linear Load),≤4%THD(Non-linear Load)				
Transferr Time	City power/Battery	0ms			
	Inverter/Bypass	0ms			
Waveform(Batt. Mode)	Pure Sinewave				
Overload	City power Mode	100%~110%:10min,110%~130%:1min,>130%:1sec			
	Battery Mode	100%~110%:30sec,110%~130%:10sec,>130%:1sec			
Battery Type					
Standard Model	Battery Type	12V/9Ah	12V/9Ah		
	Quantity	16	20		
	Typical Recharge Time	9 hours recover to 90%capacity			
	Charging Current(max.)	1A			
Long-run Model	Battery Type	Depending on applications			
	Quantity	16-20**			
	Charging Current (max.)	4.0A			
	Charging Voltage	(13.65VDCx battery number)±1%			
Efficiency					
City power Mode	94%	94%			
ECO Mode	98.5%	98.5%			
Battery Mode	92%	92%			
Display Interface					
LCD	UPS status,Load level,Battery level,Input/Output voltage,Discharge timer,and Fault conditions				
Control Management					
Smart RS-232/USB	Supports Windows2000/2003/XP/Vista/2008,Windows®7/8/10, Linux and MAC				
Optional SNMP	Support SNMP Internet Management				
Environment					
Relative Humidity	20-90%RH @0-40 °C (Non-condensing)				
Noise Level	<55dB@1m	<58dB@1m			
Physical					
Standard Unit	Dimension:W*D*H(mm)	UPS Unit: 438x610x88[2U] Battery Pack: 438x715x88 [2U]	UPS Unit: 438x610x88[2U] Battery Pack: 438x600x133[2U]	UPS Unit: 438x610x88[2U] Battery Pack: 438x600x133[2U]	UPS Unit: 438x610x88[2U] Battery Pack: 438x600x133[2U]
	Net Weight(kg)	UPS Unit:17 Battery Pack:48	UPS Unit:17 Battery Pack:57	UPS Unit:20 Battery Pack:53	UPS Unit:20 Battery Pack:63
Long Backup Unit	Dimension:W*D*H(mm)	438*610*88[2U]		438*610*88[2U]	
	Net Weight(kg)	17		20	

Power Guard

PGH Series High Frequency online Rack UPS Three Phase In Single Phase Out 10~20KVA



Load power factor of 0.8

Adapts to the characteristics of most current electrical equipment and increases the load carrying capacity of the machine.



Real time monitoring and alarm

Detect important parameters in real time, and immediately give an alarm if any abnormality is found.

DSP

DSP digital control technology

All power conversion links such as rectification, inverter, charging, and discharge are digitally controlled.



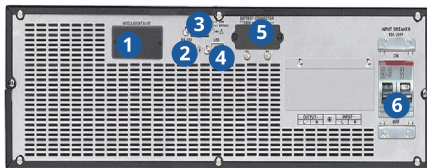
Energy saving

Under normal use, the product will not cause harm to people and the environment.



Main Feature

- True double-conversion
- DSP technology guarantees high performance
- Output power factor correction
- Wide input voltage range(60-150 VAC)
- Active input power factor correction 0.99
- 50Hz/60Hz frequency converter mode
- ECO mode operation for energy saving(ECO)
- Emergency power off function (EPO)
- Generator compatible
- Charger capacity expansion to 8A for long-run models
- SNMP/USB/RS-232 communications
- 3-stage extendable charging design for optimized battery performance
- Maintenance bypass available
- Adjustable battery numbers



10KVA Back Panel

1. INTELLIGENT SLOT
2. RS-232
3. EPO
4. USB
5. BATTERY CONNECTOR
6. INPUT BREAKER ON/OFF

Model PGH	3110RT(L)	3115RT(L)	3120RT(L)
Capacity	10KVA/10KW	15KVA/15KW	20KVA/20KW
Input			
Connection Mode	Single Phase +Ground		
Input Voltage	380/400/415VAC		
Voltage Range	285-520VAC@100%Load 176-520VAC@50%Load		
Frequency Range	40-70HZ		
Power Factor	≥0.99		
Output			
Output Voltage	200/208/220/230/240Vac		
Voltage Regulation	±1%		
Frequency	SYN Correction Range	46-54Hz/56-64Hz	
	Battery Model	50Hz±0.1Hz/60Hz±0.1Hz	
Distortion(THDU)	≤2%(Linear load)≤3%(Non-linear load)		
Peak Coefficient	≥3:1		
Overload Capacity	110%, convey to bypass after 1h; 125%, convey to bypass after 10min; 150%, convey to bypass after 1min.		
Transfer Time	City power/Battery	0ms	
	Inverter/Bypass	0ms	
Battery Type			
Quantity	20	32-40 optional	
Charging Current	1A/2A/4A/6A/12A settable		
Battery Mode	Depends on the applicant		
Efficiency			
City Electricity Mode	96		
Display Interface			
LCD/LED	Loading Size, Battery Capacity, City Electricity Mode, Battery Mode, Bypass Mode, Fault Indication		
Control Management			
Smart RS-232/USB	Supports Windows@2000/2003/XP/Vista/2008, Windows@7/8/10, Linux and MAC		
Optional SNMP	Support SNMP Internet Management		
Environment			
Temperature	0-40°C		
Relative Humidity	0-95%(Non Condensing)		
Noise Level	<62dB@1m	<65dB@1m	
Physical			
Dimension:W*D*H(mm)	438*680*133		438*680*266
Net Weight(kg)	29		30

Power Guard

PGH Series High Frequency online Rack UPS Three Phase In Three Phase Out 10~60KVA

Zero Switch
The UPS will switch to battery mode when the mains power is normal Zero time, which can effectively ensure the safety and reliability of the instrument.

Active Input Power Factor Correction (PFC)
Active power factor correction via digital control achieves ≥ 0.99 input power factor to prevent grid pollution, save energy and cut system costs.

Load power factor of
Adapts to the characteristics of most current carrying capacity of the machine.

Can be used with a generator
The wide range of input voltages and frequencies isolates the bad power generated by the generator to provide a pure, stable power supply to the load.

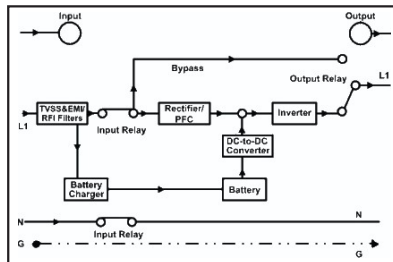


Main Feature

- True double-conversion
- LCD screen auto-rotates (only available for 10K-30K models)
- DSP technology guarantees high performance
- Output power factor 1.0
- With Power Factor Correction
- 50Hz/60Hz frequency converter mode
- ECO mode efficiency (ECO)
- Emergency power off function (EPO)
- Support generator
- Support for two inputs
- Three stage charging design to optimize battery performance
- Adjustable number of batteries for extended operation
- Support for shared battery packs
- Optional isolation transformer
- Optional parallel operation
- NMP+USB+RS-232 multiple communications
- Power walk-in function

Operating Principle

The Operating Principle of the UPS is shown as below



Model PGH	3310RT(L)	3315RT(L)	3320RT(L)	3330RT(L)	3340RT(L)	3360RT(L)
Capacity	10kVA/10W	15kVA/15kW	20kVA/20kW	30kVA/30kW	40kVA/40kW	60kVA/60kW
Parallel capacity	4 max					
Input						
Connection Mode	Three in, three out					
Rated Voltage	3×380 VAC(3PH+N)					
Voltage Range	190-520 VAC(three phase)@50%load. -305~478 VAC(3 phase)@100%load					
Frequency Range	46-54Hz/56-64Hz					
Power Factor	≥ 0.99 100%load					
Output						
Rated voltage	3×360*380/400/415 VAC(3PH+N)					
Output Accuracy (Batt.Mode)	$\pm 1\%$					
Frequency	SYN Correction range	46-54Hz/56-64Hz				
	Battery Model	50 Hz ± 0.1 Hz/60 Hz ± 0.1 Hz				
Current Crest Ratio	3:1(max.)					
Harmonic Distortion	$\leq 1\%$ THD (Linear Load) $\leq 3\%$ THD(Non-linear Load)					
Transfer Time	City power/Battery	0 ms				
	Inverter/Bypass	0ms				
Waveform(Batt.Mode)	Pure sine wave					
Overload	City Electricity Mode	100-110%60 minutes, 110-125%10 minutes, 125% -150%1 minute; >150%Immediate protection				
	Battery Mode	100-110%60 min, 110-125%10 min, 125% -150%1 min; >150%Immediate protection				
Battery Type						
Battery Type	Multiple battery boxes to suit the application					
Quantity	20	32-40(Adjustable)				
Maximum Charging Current	1A-12A(Adjustable)				1A-16A (Adjustable)	1A-18A (Adjustable)
Charging Voltage	± 13.65 VDC x(N=10)	$\pm 13.65V \times N(N=16-20)$				
Efficiency						
City Electricity Mode	$\geq 95.50\%$					
ECO Mode	$\geq 98.50\%$					
Battery Mode	$\geq 94.50\%$					
Control Management						
Smart RS-232/USB	Support for Windows @Series, Linux and MAC					
Optional SNMP	Power management support for SNMP management and network management					
Environment						
Relative Humidity	0-95%relative humidity(non condensing)and temperature 0-40°C					
Noise Level	<62dB@1m	<65dB@1m	<70dB@1m			
Physical						
Dimension:W*D*H(mm)	680*438*133[3U]				797*438*176[4U]	
Net Weight(kg)	27	30	32	40	45	

Power Guard

PGI Series Industrial UPS Three Phase In Three Phase Out 10~200KVA



Zero Switch

The UPS will switch to battery mode when the mains power is normal. Zero time, which can effectively ensure the safety and reliability of the instrument.



User-friendly design

LCD liquid crystal display, which can display the working status and parameter information of the UPS in real time, facilitating user management of the UPS.



DSP

DSP digital control technology

All power conversion links such as rectification, inverter, charging, and discharge are digitally controlled.

Can be used with a generator

The wide range of input voltages and frequencies isolates the bad power generated by the generator to provide a pure, stable power supply to the load.



Product Description

CNP Series is a full digitized DSP controlled online double conversion 3 Phase Industrial UPS. LF transformer isolated all interferences such as Mains Input Surge or Load impact from the UPS, which also greatly reduces the risk of the UPS and load. FC Series has power parallel redundancy feature with real 0.9 output PF. It also contains a friendly and intuitive user interface. It provides reliable, stable, and constant AC power for IT equipment, telecommunication critical devices.

Main Feature

- Advanced silicon controlled rectifier intelligent control technology
- Adopt the fifth generation IGBT inverter control technology, output power factor PF=0.9
- Strong adaptability of power grid
- Adaptable to a wide range of generator equipment
- Overall Efficiency up to 90%. Can reach to 98% on ECO Mode
- Superload adaptability and output overload and short circuit capability
- Intelligent battery management system design
- Intelligent fault diagnosis, rich fault records, large capacity fault storage space
- Friendly and Intuitive User Interface. Large Color Touch LCD Screen with multi-functional buttons
- Flexible Single or Dual Utility Power Input to comprehensively protect load devices

Model PGI	3310L	3315L	3320L	3330L	3340L	3360L	3380L	33100L	33120L	33160L	33200L	
Capacity	10KVA /9KW	15KVA /13.5KW	20KVA /18KW	30KVA /27KW	40KVA /36KW	60KVA /54KW	80KVA /72KW	100KVA /90KW	120KVA /108KW	160KVA /144KW	200KVA /180KW	
Host Machine Specification												
UPS Structure	Online Double Conversion											
Appearance	Low Frequency with Output Isolated Transformer											
Overall efficiency(AC-AC)	90%											
Noise (In 2 Meters)	<50-60dB											
Working Temp.	-10-40°C											
Storage Temp.	-25 ~ 60 °C(Without Batteries)											
Humidity	<95%, Non-Condensing											
National Standard	EN50091-1/IEC950											
International Standard	EN 50091-1/2; EN62040-1; EN62040-2											
Parallel Redundancy	Available up to 8units											
Protection	Overload, Short-Circuit, Over Temp., Utility Power Voltage High/Low, BAT Voltage High/Low											
ECO	Available											
EPO Function	Available											
DC Start	Available (Not Recommended)											
Generator Compatibility	Available											
Display	5-7 inch LCD color touch screen + LED working indicators including Input/Output Voltage, Frequency, Current, Power, Load											
Mute	Auto											
Cabinet Standard	IP20											
Cooling System	Intelligent Speed Control Cooling Fan											
Elevation	<1500M, Without Derated											
Rectifier Specification												
Input Voltage	380Vac+N+W(3phase+PE)											
Input Voltage Range	285-475Vac											
Input Frequency Range	45-65Hz											
Input PF	0.95(with input filter)											
THDI	<5%(with optional accessories)											
Dual Input Availability	Available (Optional accessories)											
Input Mis Phase Protection	Misphase Alarm, UPS will not be started											
Input Phase Lost Protection	Phase Lost Alarm, UPS work on Bypass mode											
Soft-Start	>20 Seconds											
Input Current	23A	31A	39A	54A	70A	100A	125A	160A	192A	256A	320A	
Output Specification												
Output Voltage	Line Voltage: 380*(1+1%)AC or Phase Voltage: 220*(1+1%)AC											
Output PF	0.8/0.9(No lag)											
Output Voltage Regulation	380Vac±1%(Static Load); 380Vac±2%(50-0% Sudden Change); 380Vac±3%(100-0% Sudden Change)											
Output Freq	±8% at 50Hz; Online Mode tracking input and bypass freq; ±0.1% when input or bypass frequency is more than ±8% or under BAT Mode											
THD	<1%(Linear Full Load); <3%(Non-Linear Full Load)											
3 Phase Unbalanced	Allow 3 Phase 100% Unbalanced											
Output Volt. Unbalanced	≤1%(Balanced Load); ≤2%(50% Balanced Load)											
Input/Output Phase Shift	≤1*(Balanced Load); ≤2*(50% Balanced Load)											
Frequency Tracking Range	45-65Hz											
Output Waveform	Pure Sine Wave											
Overload	>125%; More than 10 mins; >150%; More than 60s transfer to bypass											
Crest Ratio	3:1											
Short Circuit	Circuit Auto-Protection, Bypass Switch Tripping											
Output Abnormal	INV Output Auto-Locked Protection											
Bypass Specification												
Static Bypass Transfer Time	0ms											
Static Bypass Input Range	380Vac(-15~+15%)											
Frequency Range	50/60Hz±1Hz, ±2Hz, ±3Hz Adjustable											
Bypass->INV Transfer Time	2ms											
Frequency Tracking Speed	0.5-2Hz/s											
Manual Maintenance Bypass	Available											
Battery Specification												
Charging Methods	DSP Controlled Charger; Equalized/Pulse Charge; Float Charge; Intelligent Battery Management											
Type	Sealed Lead Acid Maintenance Free											
Rated Volts/Units	12V/384Vdc, Std. for 32 Units, adjustable from 28-32 units											
Float Charge Voltage	438Vdc											
Charging Current	Can be set from the front screen											
Abnormal Protections	BAT over-charged; Emergency charger shutdown protection or UPS shutdown protection											
Communication Specification												
Communication Port	RS232/SNMP/485/Dry Contact (Optional/Accessory)											
Remote Software	Multi-functional Monitoring System, Online and BAT Mode Status, BAT Fault, Remote Control											
Physical Parameters												
Size(W*H*D)mm	475*990*700			500*1100*800			605*1350*800			800*1600*800		1100*1850*850
Net Weight Kg	210	223	230	280	330	450	550	630	750	810	855	