

RP Series

RP-N Series 3 Phase LF/Transformer Based Online UPS (250-500KVA)



System Introduction

RP-N Series is a high end 3 Phase Input/ Output transformer based UPS system. It adapts the innovative designing concept of integration. It also has significantly improved the efficiency and reliability. Product Performance Index has reached international level. With Multiple Digital Control Modules, such as DSP, MCU, and CPLD, RP-N can be non-prioritized paralleled up to 8 units to lower operating costs without compromising reliability, performance, and availability.

System Features

High Performance Index

- ◆ Advanced Rectifier and IGBT Technology. Input THDI \leq 4%, Input Power Factor \geq 0.99 to save more energy.;
- ◆ Wide Input Voltage Range. High adaptive capacity and Generator Capability;
- ◆ High Load Compatibility and short-circuit protection. High Overload Ability;
- ◆ Input Power Factor can be upto >0.99 and THDI $<$ 4.5% with optional filters;
- ◆ Output Power Factor 0.9 without lagging;
- ◆ Self-Evaluation and Alarm of Phase Misconnection or Lost;



DSP Digital Controller

Safe and Reliable

- ◆ RP-N Series use full-digitized control to operate all power conversion sections during the operations, which has higher system reliability;
- ◆ Cooling Fans internal Parallel Redundancy Design;
- ◆ Output Isolated Transformer Built-in. It can reduce impacts and interferences from Load Harmonic Wave Current and N-Wire Voltage;
- ◆ 90% of system components are from international brands. All devices has been aged and tested for 24 hours before leaving the factory

Rich Optional Accessories

- ◆ Multiple communication interfaces integrated (RS232, RS485, Dry Contact, EPO, Etc.) ;
- ◆ Optional SNMP communication adapter available

Special Design and Easy Operation

- ◆ Front Maintenance. Available for top connections with protection devices.;
- ◆ Intuitive User Interface with large Dot-matrix LCD Screen and multi-functional keyboard

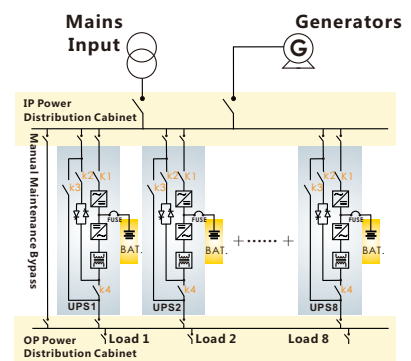
Compatible applications/loads

RP-N Series is designed for many different applications and compatible Loads, such as Data Center, Telecommunication Center, Network management center, financial center Security Trading Settlement Center, Banking. Large Theater, Stadium, traffic Administration Bureau, Road and Railroad Tunnel Lightning Control and Monitoring Center, Port Information Center.

Semiconductor production line, automatic production line and related devices.



5/7 inch Multi-language LCD+LED



Specification

Model	RP2500L33-N	RP3000L33-N	RP4000L33-N	RP5000L33-N
Capacity	250KVA/225KW	300KVA/270KW	400KVA/360KW	500KVA/450KW
Host Machine Specification				
UPS Structure	Online Double Conversion			
Appearance	Low Frequency with Output Isolated Transformer			
Overall Efficiency (AC-AC)	94% (With Optional Accessories)			
ECO	98%			
Noise (In 2 Meters)	67dB			
Working Temp.	0-40°C			
Storage Temp.	-15 ~ 50°C (without batteries)			
Humidity	< 95% Non-Condensing			
National Standard	IEC60950-1, IEC62040-1-1			
International Standard	IEC62040-2, IEC62040-3			
Parallel Redundancy	Parallel Redundancy Upto 8 Units			
Protection	Overload, Short-Circuit, Over Temp., Utility Power Voltage High/low, BAT Voltage High/low			
DC Start	Available			
Generator Compatibility	Available			
Display	LCD Display(Multi-Language with all kinds of messages)+LED			
Mute	Auto			
Cabinet Standard	IP20			
Cooling System	Intelligent Speed Control Cooling Fan			
Elevation	< 1500M, Without Derated			
Rectifier Specification				
Input Voltage	380/400/415Vac+N+W (3 phase + PE)			
Input Voltage Range	298-498Vac			
Input Frequency Range	50/60Hz± 10%			
Soft-Start	5-600 Seconds, Adjustable			
Input PF	0.95 (With Optional Input Wave Filter)			
THDI	< 5% (With Optional Accessories)			
Output Specification				
Output Voltage	Line Voltage: 380× (1±1%) AC or Phase Voltage: 220× (1±1%) AC			
Output PF	0.9			
Output Voltage Regulation	380Vac±1% (Static Load) ; 380Vac±2% (50-0% Sudden Change) ; 380Vac±3% (100-0% Sudden Change)			
Voltage Dynamic Response	±5%, (0~ 100% Sudden Change)			
Voltage Dynamic Response Time	<5ms			
Synchronization Range	±5%			
Output Freq	±0.02% (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 Swift	≤1° (Balanced Load) , ≤2° (50% Balanced Load)			
Frequency Tracking Range	45-65Hz			
Output Waveform	Pure Sine Wave			
Overload	With output PF 0.9, 105%: Long time Operation, 110%: 1 Hour, 125%: 10 Mins, 150%:1 Min			
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 Range	380/400/415Vac (±10%,±15%,±20% Selectable) 3 Phase+N(3 Phase+N+PE)			
Frequency Range	50/60Hz± 10%			
Bypass -> INV Transfer Time	2ms			
Bypass Overload Ability	200%: 5 Mins ; 1000%:10 Seconds			
Manual Maintenance Bypass	Available			
Battery Specification				
Type	Sealed Lead Acid Maintenance Free			
Std. Model Rated Volts/Units	12V,384Vdc/32 Units			
Float Charge Voltage	Equalized Charge, Float Charge, Intelligent Battery Management			
BAT Low	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 mm(D)	850	850	850	850
Size mm(H)	1900	1900	1900	1900
Size mm(W) 6 pulse	1640	1640	2265	--
Size mm(W) 12 pulse	2265	2265	2265	2590
Net Weight Kg(6 pulse)	1580	1580	2105	--
Net Weight Kg(12 pulse)	2090	2090	2500	2850

Note : Specifications are subject to change without further notice.

