

Crystal Plus Na Series

CL Plus 6000Na - CL Plus10000Na
6~10kVA, 1:1 phase PF 1.0



SUPER SAFETY

Sodium has less activity than lithium, less dendrites generated inside the cells during high-rate discharge, deep discharge and even over-discharge; The unique ethylene carbonate (EC) electrolyte, has better sodium-ion solubility and higher flash-point, both guarantee sodium-ion barely cause thermal runaway; It will barely have smokes, fires, explosion even under worse cases like puncturing, squeezing, over-charge, over-discharge etc.

Features

- Output Power Factor 1.0
- Wide Input Voltage (100V-300V)
- ECO mode for energy saving
- Generator Compatible
- Power Charger up to 12A
- DC start function (Cold Start)
- Input L-N detection function
- Sodium-Ion Batteries
- True On-Line double Conversion
- Super-fast charging fully re charging at minimum 35Min
- Super long Life with up to 2000 cycles life @ 100% DOD

SUPER HIGH RATE DISCHARGE

Up to 15C discharge rate, excellent matching the short time & high power backup of UPS

SUPER LONG LIFE.

2000 cycles at 100% DOD, equals to LiFePO4, 5 times longer than VRLA

SUPER STRONG THERMAL TOLERANCE & LOW TEMPERATURE PERFORMANCE

Sodium-ion can work under wider temperatures from -40°C-80°C, up to 88% capacity retention even under -20°C, >40% more than its lead acid or lithium-ion counterparts

SUPER FAST RECHARGE

Sodium-ion has much better solubleness and much smaller Stokes diameter in same density electrolytes, thus much better conductivity and > 50% faster recharging rate than its lithium-ion counterpart.



Technical Specifications:

Model	CL Plus6000 Na	CL Plus10000 Na
Capacity	6kVA/6KW	10kVA/10KW
Input		
Nominal Voltage	208/220/230/240VAC, L+N+PE	
Voltage Range	100-300VAC	
Frequency	40-70Hz	
Power Factor	> 0.99	
THDi	< 3% (linear load); < 5% (non-linear load)	
Output		
Nominal Voltage	208/220/230/240VAC, L+N+PE	
Voltage Regulation	±1%	
Frequency	50/60Hz±0.1%	
Crest Ratio	3:1	
THDu	≤2% (linear load); ≤5% (non-linear load)	
Transfer Time	Line mode to battery mode,0ms; inverter to bypass ,4ms (typical)	
Power Factor	1.0	
Waveform	Pure sine wave	
Overload time	Line mode:	Battery mode:
	30min@102%-110% load	10min@102%-110% load
	10 min@110-130% load	1min@110-130% load
	30s@130%-150% load	10s@130%-150% load
	< 200ms@150% load	< 200ms@150% load
Efficiency		
Line Mode	93%	
Battery Mode	92%	
ECO Mode	98%	
Battery (sodium-ion)		
Energy	921Wh	1152Wh
Charging Time	35min	38min
Battery (Lead acid)		
Voltage	192VDC/240VDC	
Battery Number	9Ah*16pcs/20pcs(Standard model); External (Long run model)	
Charging Current	1A(Standard model); 1-12V(Long run model)	
Charging Mode	Two/Three- period charging	
Management		
Intelligent port	RS232/USB port/SNMP card (optional)/Dry contact kit (optional)	
Environment		
Operation Temperature	0-40°C	
Storage temperature	-15~60°C(Battery:0~40°C)	
Relative Humidity	0-95%(non-condensing)	
Noise	< 50dB@1 meter	
Altitude	Up to1000m without derating	
Standard & Certification		
Standard and Approvals	EN/IEC 61000, EN/IEC 62040	
Physical		
Case size(L*W*H)(mm)	190*440*700(Standard model); 190*390*320 (Long run model)	
Weight(KG)	22.2(sodium) 9.6/47.8(lead acid)	26.4(sodium) 11.2/49.4(lead acid)
Carton size(L*W*H)(mm)	285*540*810(Standard model); 500*285*430(Long run model)	