



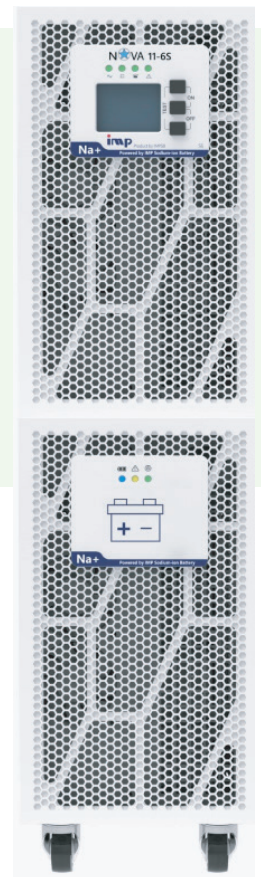
NOVA Sodium Series

SODIUM-ION BATTERY POWERED ON-LINE UPS

Vitality Series 6-10kVA

Product Features

- True double conversion on-line ;
- Output Power factor 1.0 ;
- Next-Gen bridgeless PFC technology, line efficiency up to 96% ;
- Lighter weights for easier transportation and installation ;
- Powered by sodium-ion batteries ;
- Fast-charge less than 1 hour ;
- Ultra-long battery life up to 2000 cycles ;
- Support operation at -20°C ;
- Shelf life up to 12 months ;



WHY SODIUM-ION BATTERIES

◆ SUPER HIGH RATE DISCHARGE

Up to 15C discharge rate for sodium-ion cell, excellent matching the short time & high power backup of UPS;

◆ SUPER LONG LIFE

2000 cycles equals to LiFePO₄, 5 times longer than VRLA;

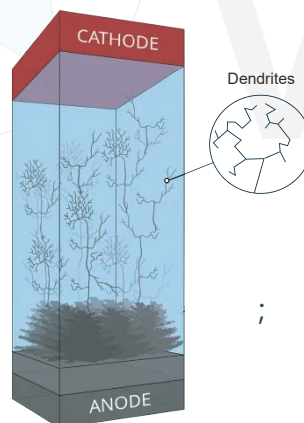
◆ SUPER STRONG THERMAL TOLERANCE & LOW TEMPERATURE PERFORMANCE

Sodium-ion cells 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;

◆ GREEN & SUFFICIENT SUPPLY

Sodium is common accessible material, no toxic and pollution in comparing with lead; Sodium-ion battery is greener than lead acid battery in whole life cycle;

Among the Earth's Crust, lithium element abundance is just 0.0017%, while sodium element abundance is 2.3%. Sodium-ion battery has more sufficient supply and lower costs than lithium-ion in long term;



◆ SUPER SAFETY

Sodium is more active than lithium, during chemical reaction inside the cells, the dendrites generated between anode and cathode, would be self-dissolved easier than lithium, less risks to puncture the separator and cause short-circuit;

The unique ethylene carbonate (EC) electrolyte, has better sodium-ion solubility and higher flash-point, both guarantee sodium-ion barely cause thermal runaway;

Plus the enhanced safe design of cell mechanical structures, It will barely have smokes, fires, explosion even under worse cases like puncturing, squeezing, over-charge, over-discharge etc.;

◆ 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;

SPECIFICATION

Model	11-6S		11-10S	
Capacity	6kVA/6kW		10kVA/10kW	
Input				
Nominal Voltage	208/220/230/240VAC, L+N+PE			
Voltage Range	110-300VAC			
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:	Line mode:	Battery mode:
	10min@102%-110% load	10min@102%-110% load	30min@102%-110% load	10min@102%-110% load
	1min@110-130% load	1min@110-130% load	10 min@110-130% load	1min@110-130% load
	10s@130%-150% load	10s@130%-150% load	30s@130%-150% load	10s@130%-150% load
	<200ms@150% load	<200ms@150% load	<200ms@150% load	<200ms@150% load
Efficiency				
Line Mode	≥95%		≥96%	
ECO Mode	≥98.5%			
Battery				
Energy	864Wh		1152Wh	
Run Time (100% Load)	3min		3min 20s	
Run Time (50% Load)	10min		9min 30s	
Charging Time	< 1 hour (Temperation 25 ℃)			
Management				
Intelligent port	RS232/USB port/SNMP card (optional)/Dry contact kit (optional)			
Environment				
Operation Temperature	-20-40 ℃			
Storage temperature	-20~50 ℃			
Relative Humidity	0-95%(non-condensing)			
Noise	< 56dB@1 meter		< 58dB@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)	450*190*700	390*190*320	450*190*700	390*190*320
Packing Weight(KG)	34.0	10.3	37.0	11.2
Carton size(L*W*H)(mm)	555*295*750	500*285*430	555*295*750	500*285*430

S6-KS