

# THE WORLD 1st

## SODIUM-ION BATTERY POWERED ON-LINE UPS

VALITA LCD Series 1-10kVA



*True double on-line conversion ;  
Output Power factor 1.0 ;  
Powered by sodium-ion batteries (VRLA as optional);  
Super fast-charging, fully re-charge at minimum 30min;  
Super long life with up to 2000 cycles' life @ 100% DOD;  
Can choose green, blue, black, white*



## WHY SODIUM-ION BATTERIES

### 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 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. ;*

### 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 ;*



- Output power factor 1.0
- Wide input voltages (110V-300V)
- ECO mode for energy saving
- Generator compatible
- Powerful chargers up to 12A
- DC start function (cold start )
- Input L-N detection function

## SPECIFICATION

Model	VALITA 1101 GN		VALITA 1102 GN		VALITA 1103 GN	
Capacity	1kVA/1kW		2kVA/2kW		3kVA/3kW	
Input						
Nominal Voltage	100/110/115/120/127VAC (Optional) or 208/220/230/240VAC (Default)					
Voltage Range	100-300VAC					
Frequency	40-70Hz					
Power Factor	> 0.99					
THDi	≤3% (linear load); ≤5% (non-linear load)					
Output						
Nominal Voltage	100/110/115/120/127VAC(Optional) or 208/220/230/240VAC(Default)					
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	Long Operation@102%-110% load Max 10 min@110-130% load Max 30s@130%-150% load 500ms@ > 150% load					
Efficiency						
Line Mode	> 95.5%					
Battery Mode	≥91.50%					
ECO Mode	98.5%					
Battery(sodium-ion)						
Energy	100Wh	/	200Wh	/	300Wh	/
Run Time (100% Load)	5 Min 5s	/	4Min 28s	/	4Min 40s	/
Run Time (50% Load)	15 Min 6s	/	11Min 20s	/	13Min	/
Charging Time	42min	/	35min	/	48min	/
Battery(Lead acid)						
Voltage	24VDC	36VDC	48VDC	72VDC	72VDC	96VDC
Battery Number	9Ah*2pcs	External	9Ah*4pcs	External	9Ah*6pcs	External
Charging Current	1A	1-12A	1A	1-12A	1A	1-12A
Charging Mode	Two/Three-period charging					
Management						
Intelligent port	RS232/USB port/SNMP card (optional)/Dry contact kit (optional)					
Environment						
Operation Temperature	-20°C-40°C					
Storage temperature	-40~60°C					
Relative Humidity	0-95%(non-condensing)					
Noise	< 50dB@1 meter					
Altitude	Up to 1000m without derating					
Standard & Certification						
Standard and Approvals	EN/IEC 61000, EN/IEC 62040					
Physical						
Case size(L*W*H)(mm)	165*275*220	165*275*220	190*390*320	190*390*320	190*390*320	190*390*320
Weight(KG)	6.8(sodium) 9.35(lead acid)	4.6	13 (sodium) 15.1(lead acid)	6	14.6(sodium) 23(lead acid)	6
Carton size(L*W*H)(mm)	360*233*330	360*233*330	515*295*425	515*295*425	515*295*425	515*295*425





- True on line double conversion
- Output power factor 1.0
- Generator compatible
- ECO mode for energy saving
- USB, RS232 available, SNMP option
- Parallel port available (can be 4 pcs in parallel mode)
- Maintenance bypass available
- Laser printer and ultrasound loads acceptable
- Built-in over voltage cut-off protection and surge immunity

## SPECIFICATION

Model	VALITA 1106 GN			VALITA 1110 GN		
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); ≤3% ( non-linear load )					
Transfer Time	Line mode to battery mode 0ms					
Power Factor	1.0					
Waveform	Pure sine wave					
Overload time	Long Operation@102%-110% load Max 10 min@110-130% load Max 30s@130%-150% load 500ms@ > 150% load					
Efficiency						
Line Mode	> 95.5%					
Battery Mode	≥91.50%					
ECO Mode	98.5%					
Battery (sodium-ion)						
Energy	500Wh	/		624Wh	/	
Run Time (100% Load)	7Min 18s	/		3Min 30s	/	
Run Time (50% Load)	17Min 10s	/		9 Min 54s	/	
Charging Time	35min	/		38min	/	
Battery (Lead acid)						
Voltage	192VDC/240VDC					
Battery Number	9Ah*16pcs/20pcs	External		9Ah*16pcs/20pcs	External	
Charging Current	1A	1-12A		1A	1-12A	
Charging Mode	Two/Three- period charging					
Management						
Intelligent port	RS232/USB port/SNMP card (optional)/Dry contact kit (optional)					
Environment						
Operation Temperature	-20°C -40°C					
Storage temperature	-40~60°C					
Relative Humidity	0-95%(non-condensing)					
Noise	< 50dB@1 meter					
Altitude	Up to 1000m without derating					
Standard & Certification						
Standard and Approvals	EN/IEC 61000, EN/IEC 62040					
Physical						
Case size(L*W*H)(mm)	190*440*700	190*390*320		190*440*700	190*390*320	
Weight(KG)	22.2(sodium) 47.8(lead acid)	9.6		26.4(sodium) 49.4(lead acid)	11.2	
Carton size(L*W*H)(mm)	285*540*810	500*285*430		285*540*810	500*285*430	