VLS-(6/8/10/12)K-H1

Low Voltage Single-Phase Hybrid Inverter



Application Scenarios

Platform Capacity Expansion / Urban Households / Villa & Luxury Residence Users / Areas with Unstable Grid Power

Product Highlights

Flexible Adaptability

10-unit parallel, On/Off-grid, Generator input integrated, 28A high current PV input

High Performance

160% PV oversizing, 200% EPS peak power (60s), 220A high-current charge/discharge, 80V low start-up voltage

Safe and Secure

Battery terminal temperature monitoring, IP65 protection, Type II AC/DC SPDs, optional AFCI protection

Efficient Management

Smart load management via cloud platform & LCD screen, UPS-level switchover < 10ms (single unit)

Model	VLS-6K-H1	VLS-8K-H1	VLS-10K-H1	VLS-12K-H1
PV Input				
Recommended Max.input power(kW)	9.6	12.8	16	19.2
Start-up voltage(V)	80			
Max.DC input voltage*(V)	510			
Rated DC input voltage(V)	360			
MPPT voltage range*(V)	90 ~ 425			
No.of MPP trackers	2			
No.of DC inputs per MPPT	1 + 1	2 + 2		
Max.input current(A)	18 + 18	28 + 28		
Max.short-circuit current(A)	27 + 27	42 + 42		
Battery Side				
Battery type	Lead acid / Li-ion			
Battery voltage range(V)	40 ~ 60			
Maximum charging/discharge current(A)	135	190	200	210
List of compatible batteries	VEICHI, GreenCN, BYD, Deye, WECO, ect.			
Grid Side				
Rated output power(kW)	6	8	10	12
Max.output apparent power(kVA)	6.6	8.8	11	12
Max.input apparent power(kVA)	6.6	8.8	11	12
Max.charging power of battery(kW)	6	8	10	12
Rated AC voltage	220 / 230 Vac, L / N / PE			
Rated AC frequency(Hz)	50/60			
Max.output current(A)	28.7	38.3	43.5	52.2
Power factor	-0.8 lagging ~ 0.8 leading			
Max.total harmonic distortion	< 3% (of nominal power)			
Back-up Side				
Rated output power(kW)	6	8	10	12
Max.output current(A)	28.7	38.3	43.5	52.2
UPS switching time(ms)	< 10			
Rated output voltage	220 / 230 Vac, L / N / PE			
Rated output frequency(Hz)	50/60			
Voltage harmonic distortion	< 3% (of nominal power)			
Efficiency				
Max.efficiency(%)	96			
European efficiency(%)	96.5			
Protection				
Integration	DC Polarity Reverse Connection Protection, AC Output Overcurrent Protection, Thermal Protection, AC Output Overvoltage Protection, AC Output Short Circuit Protection, DC Component Monitoring, Overvoltage Load Drop Protection, Ground Fault Current Monitoring, Power Network Monitoring, Island Protection Monitoring, Earth Fault Detection DC Input Switch, DC Terminal Insulation Impedance Monitoring, Residual Current Detection (RCD), Surge Protection Level Rapid Shutdown, RSD			
Over voltage category	PV:II Main:III			
General Data				
Dimensions [W×H×D(mm)]	411×631×236		411*631*238	
Weight(kg)	28.6		30	
Protection degree	IP65			
Topology	Transformerless for PV Side / HF for Battery Side			
Operating Temperature Range(℃)	-25 ~ +60(>45 derating)			
Relative Humidity(%)	5 ~ 95 (condensing)			
Operating Altitude(m)	< 3000			
Cooling	Smart redundant fan cooling			
Noise Level(dB)	<45			
Display	LED+LCD			
Communication	LED + LCD / CAN, RS485, CT, NTC, WiFi / (4G, LAN Optional)			
Safety Certification	IEC 62109, IEC 61000			
Grid Connection Certification	EN 50549-1/10, IEC 61683, IEC 61727, IEC62116			