VLT-(10/12/15)K-H1

Low Voltage Three-Phase Hybrid Inverter



Application Scenarios

Platform Capacity Expansion / Villas & Luxury Residences /
Large Self-Built Homes / Small Farms / Integrated
Solar-Storage-Charging Compact Charging Stations

Product Highlights

Flexible Adaptability

10-unit parallel, On/Off-grid, Generator input integrated,
30A high current PV input

High Performance

160% PV oversizing, 110% AC output, 200% EPS peak power (10s),
290A 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 < 6 ms (single unit)

Model	VLT-10K-H1	VLT-12K-H1	VLT-15K-H1
PV Input			
Recommended Max.input power(kW)	16	19.2	24
Start-up voltage(V)	160		
Max.DC input voltage(V)	800		
Rated DC input voltage(V)	550		
MPPT voltage range(V)	200 ~ 700		
No.of MPP trackers	2		
No.of DC inputs per MPPT	2 + 2		
Max.input current(A)	30 + 30		
Max.short-circuit current(A)	36 + 36		
Battery Side			
Battery type	Lead-acid or Lithium-ion		
Battery voltage range(V)	40 ~ 60		
Maximum charging/discharge current(A)	220	250	290
List of compatible batteries	VEICHI, GreenCN, BYD, Deye, WECO, ect.		
Grid Side			
Rated output power(kW)	10	12	15
Max.output apparent power(kVA)	11	13.2	16.5
Max.input apparent power(kVA)	11	13.2	16.5
Max.charging power of battery(kW)	10	12	15
Rated AC voltage	220 / 380 , 230 / 400， 3 L / N / PE		
Rated AC frequency(Hz)	50/60		
Max.output current(A)	15.9	19.2	24
Power factor	-0.8 lagging ~ 0.8 leading		
Max.total harmonic distortion	< 3% (of nominal power)		
Back-up Side			
Rated output power(kW)	10	12	15
Max.output current(A)	15.9	19.2	24
UPS switching time(ms)	< 6		
Rated output voltage	220 / 380 , 230 / 400 , 3 L / N / PE		
Rated output frequency(Hz)	50/60		
Voltage harmonic distortion	< 3% (of nominal power)		
Efficiency			
Max.efficiency(%)	97.6		
European efficiency(%)	96.5		
Protection			
Integration	DC Polarity Reverse Connection Protection, AC Output Overcurrent Protection, AC Output Overvoltage Protection AC Output Short Circuit Protection, DC Component Monitoring, Overvoltage Load Drop Protection, Ground Fault, Current Monitoring, Arc Fault Circuit Interrupter, Power Network Monitoring, Island Protection Monitoring, Earth Fault Detection, DC Input Switch, DC Terminal Insulation Impedance Monitoring, Residual Current Detection(RCD), Rapid Shutdown, RSD(Optional)		
Over voltage category	PV:II Main:III		
General Data			
Dimensions [W×H×D(mm)]	440×660×282 (Excluding Connectors and Brackets)		
Weight(kg)	≤38.5		
Protection degree	IP65		
Topology	Transformerless for PV Side / HF for Battery Side		
Operating Temperature Range(℃)	-25 ~ +60(>45 derating)		
Relative Humidity(%)	5 ~ 95 (No condensation)		
Operating Altitude(m)	< 3000		
Cooling	Intelligent Redundant Fan Cooling		
Noise Level(dB)	≤ 55		
Display	LED+LCD		
Communication	RS485/CAN/WIFI / (4G, LAN Optional)		
Safety Certification	IEC 62109, IEC 61000		
Grid Connection Certification	EN 50549-1/10, IEC 61683, IEC 61727, IEC62116		