









Single Phase Hybrid Inverter

HV4K/4K6/5K/5K5/6K-1L





-  Support storing energy from diesel generator.
-  Supports parallel use of 6 inverters, expanding power according to actual needs.
-  AC couple to retrofit existing solar system.
-  Compatible with various battery types, such as LFP and lead-acid batteries.
-  2 MPP Trackers, with a maximum PV input power up to 1.5 times the inverter nominal power.
-  IP65-rated, suitable for indoor and outdoor installation.
-  Remote monitoring via APP, allowing real-time access to system operation data.
-  Seamless switching between on/off grid modes, with multiple smart working modes optional.

Model	HV4K-1L	HV4K6-1L	HV5K-1L	HV5K5-1L	HV6K-1L
PV String Input Data					
Max. PV Input Power [W]	6000	6900	7500	8300	9000
Max. PV Input Voltage [V]	550				
Start-up Voltage [V]	100				
MPPT Voltage Range [V]	80~500				
Rated PV Input Voltage [V]	720				
Max. Operating PV Input Current [A]	18.5+18.5				
Max. Input Short-Circuit Current [A]	26+26				
NO. of MPP Trackers/ NO. of Strings per MPP Tracker	2/1+1				
Battery Data					
Battery Type	Lithium-ion/ Lead-acid etc.				
Battery Voltage Range [V]	40~60				
Max. Charging Current [A]	120				
Max. Discharging Current [A]	120				
Charging Strategy for Li-ion Battery	Self-adaption to BMS				
Number of Battery Input	1				
AC Input/Output Data					
Rated AC Input/Output Active Power [W]	4000/4000	4600/4600	5000/5000	5500/5500	6000/6000
Max. AC Input/Output Apparent Power [VA]	4000/4000	4600/4600	5000/5000	5500/5500	6000/6000
Rated AC Input/Output Current [A]	17.4	20	21.8	24	26.1
Max. AC Input/Output Current [A]	19	22	23	26	28
Peak Power [VA]	6000@10 min	6900@10 min	7500@10 min	8300@10 min	9000@10 min
Power Factor Adjustment Range	0.8 leading~0.8 lagging				
Rated Input/Output Voltage/Range [V]	220/230, 0.9Un-1.1Un				
Rated Input/Output Grid Frequency/Range [Hz]	50/60				
Grid Connection Form	L+N+PE				
Total Current Harmonic Distortion (THDi)	<3%				
DC Injection Current	<0.5% In				
Efficiency					
Max. Efficiency	97.6%				
Euro Efficiency	97.0%				
MPPT Efficiency	99.9%				
Equipment Protection					
Integrated	PV insulation resistance detection, DC reverse polarity protection , AC short-circuit protection , AC over-current protection , AC over-voltage protection , Leakage current monitoring, DC switch(solar), Anti-islanding protection, Ground Fault Monitoring				
Surge Protection Level	Type II(DC), Type III(AC)				
Interface					
Communication Interface	CAN/RS485				
Monitor Mode	Wi-Fi, GPRS(Optional), 4G(Optional)				
General Data					
Operating Temperature Range [°C]	-25~-+60°C(>45°C Derating)				
Permissible Ambient Humidity	0-100%				
Permissible Altitude [m]	<4000				
Noise [dB]	<25				
IP Rating	IP65				
Inverter Topology	Transformerless				
Overvoltage Category	OVC III(AC), OVC II(DC)				
Cabinet Size [WxHxD mm]	370×535×192				
Weight [kg]	20.5				
Type of Cooling	Intelligent Fan				
Safety/ EMC Standard	IEC62109-1, IEC62109-2, IEC/EN 61000-6, IEC/EN 61000-3				
Grid Regulation	EN 50549, G99, CEI 0-21, UNE 217001, UNE 217002, RD 647, IEC 62116, NTS, VFR				