

Three Phase Hybrid Inverter

HV6K/8K/10K/12K-3H

Yelon

ESS



- 100%

100% three-phase unbalanced output.
- 1.5

2 MPP Trackers, with a maximum PV input power up to 1.5 times the inverter nominal power.
- IP65

IP65-rated, suitable for indoor and outdoor installation.
- APP

Remote monitoring via APP, allowing real-time access to system operation data.
- Seamless

Seamless switching between on/off grid modes, with multiple smart working modes optional.

Model	HV6K-3H		HV8K-3H		HV10K-3H		HV12K-3H	
PV String Input Data								
Max. PV Input Power [W]	9000		12000		15000		15000	
Max. PV Input Voltage [V]	1000							
Start-up Voltage [V]	250							
MPPT Voltage Range [V]	200~950							
Rated PV Input Voltage [V]	720							
Max. Operating PV Input Current [A]	14+14				14+28			
Max. Input Short-circuit Current [A]	17+17				17+34			
NO. of MPP Trackers/ NO. of Strings per MPP Tracker	2/1+1				2/1+2			
Battery Data								
Battery Type	Lithium-ion							
Battery Voltage Range [V]	160~600							
Max. Charging Current [A]	50							
Max. Discharging Current [A]	50							
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]	12000/6000		16000/8000		16000/10000		16000/12000	
Max. AC Input/Output Apparent Power [VA]	12000/6600		16000/8800		16000/11000		16000/12000	
Rated AC Input/Output Current [A]	8.6/8.6		11.5/11.5		14.4/14.4		17.3/17.3	
Max. AC Input/Output Current [A]	17.3/9.5		23.1/12.7		23.1/15.9		23.1/17.3	
Peak Power [VA]	9000@60s		12000@60s		15000@60s		18000@60s	
Power Factor Adjustment Range	0.8 leading~0.8 lagging							
Rated Input/Output Voltage/Range [V]	230/400, 0.9Un-1.1Un							
Rated Input/Output Grid Frequency/Range [Hz]	50/60							
Grid Connection Form	3L+N+PE							
Total Current Harmonic Distortion (THDi)	<3%							
DC Injection Current	<0.5% In							
Efficiency								
Max. Efficiency	97.8%		97.8%		98.0%		98.0%	
Euro Efficiency	97.5%		97.5%		97.6%		97.6%	
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), DC over voltage protection(Battery), Anti-islanding protection, Grid monitoring							
Surge Protection Level	Type II(DC), Type III(AC)							
Interface								
Communication Interface	CAN/RS485							
Monitor Mode	WIFI							
General Data								
Operating Temperature Range [°C]	-25~+60°C(>45°C Derating)							
Permissible Ambient Humidity	0-95%(no condensing)							
Permissible Altitude [m]	2000							
Noise [dB]	<40							
IP Rating	IP65							
Inverter Topology	Transformerless							
Overvoltage Category	OVC III(AC), OVC II(DC)							
Cabinet Size [WxHxD mm]	504×514×199							
Weight [kg]	33							
Type of Cooling	Natural Convection							
Safety/EMC Standard	IEC62109-1, IEC62109-2, IEC/EN 61000-6							
Grid Regulation	EN 50549, VDE-AR-N 4105, VFR, PSE 2018							