

All-In-One C&I PV ESS Cabinet

VN-HES30-HC96 | VN-HES40-HC96
VN-HES50-HC112 | VN-HES60-HC112



Three phase 100%
unbalanced load



PACK-level plus cabin-level fire
protection, safe and controllable



Cloud operation and
maintenance



Flexible expansion
Easy installation and maintenance



PV



Wind



Industrial
and
Commercial



Grid Side

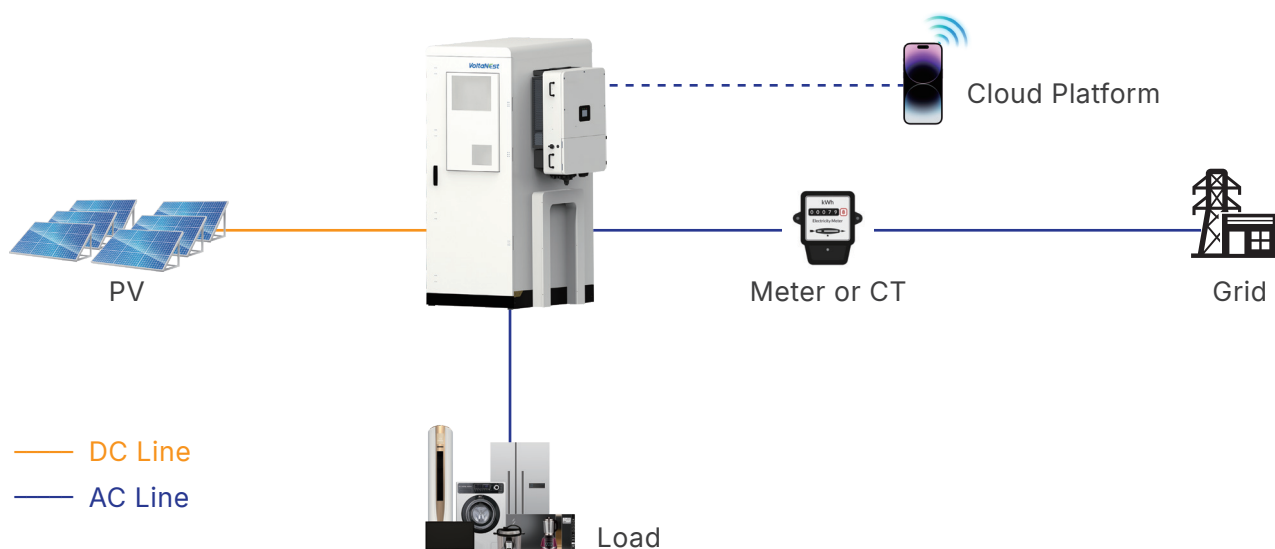


Hybrid
Charging



Grid

► Connect Diagram



Model	VN-HES30-HC96	VN-HES40-HC96	VN-HES50-HC112	VN-HES60-HC112
System Specification				
Rated Output Power	30kW	40kW	50kW	60kW
System Capacity	96.46kWh	96.46kWh	112.53kWh	112.53kWh
Battery Type	LiFePO4			
Battery Cell	3.2V/314Ah			
Connection Method	1P96S	1P96S	1P112S	1P112S
Battery Cluster	307.2V/314Ah	307.2V/314Ah	358.4V/314Ah	358.4V/314Ah
Max. Charging/Discharging Current	157A			
Operating Temperature Range	Charge -20~55°C; Discharge 0~55°C			
Cycle Life	>8000cycles			
Input (PV)				
Max. Input Power	48000Wp	64000Wp	80000Wp	96000Wp
Max. Input Voltage	1100V			
Start-up Voltage	200V			
Rated Voltage	620V			
MPPT Voltage Range	180V-1000V			
Number of MPP Trackers	4			
Number of String per MPPT	8			
Max. Current per MPPT	4×40A			
Max. Short Circuit Current per MPPT	4×60A			
Output (On-Grid)				
Rated Output Power	30kW	40kW	50kW	60kW
Max. Output Power	33kVA	44kVA	55kVA	66kVA
Max. Output Current	50A	66.7A	83.4A	100A
Max. Input Power from Grid	45kW	60kW	75kW	90kW
Max. Input Current from Grid	68.4A	91A	113.7A	136.4A
Rated Grid Voltage	3/N/PE, 230V/400Vac			
Rated Grid Frequency	50Hz/60Hz			
THDi(@Rated Power)	<3%			
Power Factor	0.8 leading~0.8 lagging			
Battery				
Battery Type	Lithium			
Battery Voltage Range	300V-850V			
Max. Charge / Discharge Power	44kW	44kW	55kW	66kW
Max. Charge / Discharge Current	2*100A			
Communication	CAN / RS485			
Output (EPS)				
Rated Output Power	30kW	40kW	50kW	60kW
Max. Output Current	45.6A	60.7A	75.8A	91A
Peak Output Power, Time	1.5 times / 10s			
Switch Time	<10ms			
Rated Voltage	3 / N / PE, 230V / 400Vac			
Rated Frequency	50Hz / 60Hz			
Max.AC Passth Rough Current	150A			
Output (Generator)				
Max. Output Power	30kW	40kW	50kW	60kW
Max. Output Current	45.6A	60.7A	75.8A	91A
Rated Voltage	3 / N / PE, 230V / 400Vac			
Rated Frequency	50Hz / 60Hz			
Efficiency				
Max. Efficiency	98.40%			
European Efficiency	97.50%			
Battery Charge /Discharge Efficiency	97.50%			
Protection				
Protection	DC Switch, DC Reverse Polarity Protection,Anti-islanding Protection,AC Short Circuit Protection, Residual Current Monitoring, Ground Fault Monitoring, Over Current /Voltage Protection, BatteryActive Function, I-V Curve Scan			
Surge Protection	Type II			
AFCI Protection	Optional			
General Data				
Display	LCD/LED			
Battery Cabinet Weight	850kg	1100kg		
Battery Cabinet Dimension	800×2080×1210mm	800×2312×1210mm		
Inverter Weight	92kg			
Inverter Dimension	620×900×300 mm			
OperatingTemperature Range	-30 ~ +60°C			
Cooling Method	Liquid Cooling			
Protection Degree	Inverter IP66, Battery Cabinet IP54			
Max. Operating Altitude	4000m			
Relative Humidity	0~100%			
Self-consumption	<15W			
Topology	Transfomerless			