

All-In-One C&I PV ESS Cabinet

VN-HES30-HR96 | VN-HES40-HR128 | VN-HES50-HR176
VN-HES60-HR208 | VN-HES100-HR241



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



Flexible expansion
Easy installation and maintenance



Cloud operation and maintenance



PV



Industrial and Commercial



Wind



Grid Side

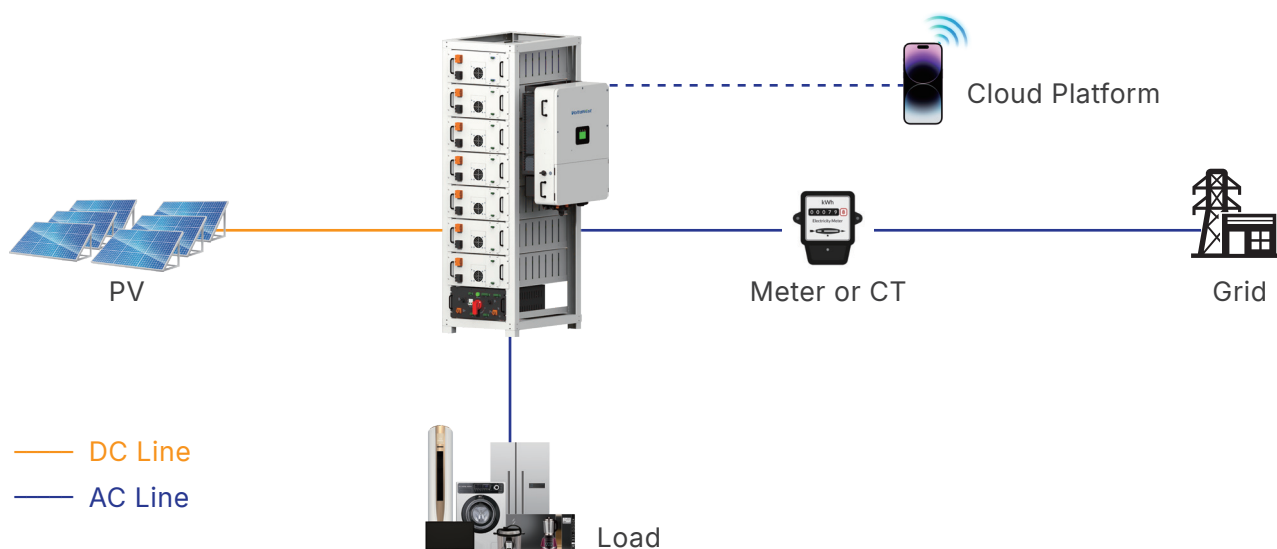


Hybrid Charging



Grid

► Connect Diagram



Model	VN-HES30-HR96	VN-HES40-HR128	VN-HES50-HR176	VN-HES60-HR208	VN-HES100-HR241
System Specification					
Rated Output Power	30kW	40kW	50kW	60kW	100kW
System Capacity	96.46kWh	128.61kWh	176.84kWh	208.99kWh	241.15kWh
Battery Type	LiFePO4				
Battery Cell	3.2V/314Ah				
Connection Method	1P96S	1P128S	1P176S	1P208S	1P240S
Battery Cluster	307.2V/314Ah	409.6V/314Ah	563.2V/314Ah	665.6V/314Ah	768V/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	160000Wp
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	100kW
Max. Output Power	33kVA	44kVA	55kVA	66kVA	110kVA
Max. Output Current	50A	66.7A	83.4A	100A	166.8A
Max. Input Power from Grid	45kW	60kW	75kW	90kW	150kW
Max. Input Current from Grid	68.4A	91A	113.7A	136.4A	227.4A
Rated Grid Voltage	3 / N / PE, 230 V / 400 Vac				
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	110kW
Max. Charge / Discharge Current	2×100A				
Communication	CAN/RS485				
Output (EPS)					
Rated Output Power	30kW	40kW	50kW	60kW	100kW
Max. Output Current	45.6A	60.7A	75.8A	91A	151.6A
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	100kW
Max. Output Current	45.6A	60.7A	75.8A	91A	151.6A
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 Part Weight	750kg	1000kg	1330kg	1560kg	1800kg
Battery Part Dimension	624×1768×800mm	624×2242×800mm	1168×1768×800mm	1168×2000×800mm	1168×2242×800mm
Inverter Weight	92kg				
Inverter Dimension	620×900×300 mm				
OperatingTemperature Range	-30 ~ +60°C				
Cooling Method	Smart Air Cooling				
Protection Degree	Inverter IP66, Battery IP20				
Max. Operating Altitude	4000m				
Relative Humidity	0~100%				
Self-consumption	<15W				
Topology	Transformerless				