

VHT-30K/50K-100-H

30A

PV Input Current

100%

Unbalanced Output

100A

Charge/Discharge

Commercial | Three Phase | HV Battery | 4 MPPTS

Features

Maximized Energy Harvesting

- 110% unbalanced output enhances self-consumption
- 100A charging/discharging for efficiency energy transfer
- Continuous 110% AC overloading sustains power
- Starts at 135V for more generation time

Engineered for Versatility

- Max.10 pcs parallel for on-grid operation and max.4 pcs parallel for off-grid operation
- 120% max backup @60s handles overloads
- IP65 protects both indoors and outdoors

Intelligent Energy Dynamics

- Five work modes for diverse use
- Six charge/discharge intervals optimize control
- Centralized smart management for efficiency
- Supports diesel generators for diverse energy sourcing

Simplified Interaction

- Remote upgrades maintain system health
- OLED and App for easy control

VHT-30K/50K-100-H Hybrid Inverter



Technical Specifications

Mode		VHT-30K-100-H	VHT-50K-100-H
PV Input			
Recommended Max.input power	[kW]	45.0	75.0
Start-up voltage	[V]	135	135
Max.DC input voltage*	[V]	1000*	1000*
Rated DC input voltage	[V]	620	620
MPPT voltage range*	[V]	200-850*	200-850*
No.of MPP trackers		4	4
No.of DC inputs per MPPT		2	2
Max.input current	[A]	30x4	30x4
Max.short-circuit current	[A]	40x4	40x4
Battery Side			
Battery type		Lithium Battery (with BMS)	
Battery voltage range	[V]	135-750	
Maximum charging/discharge current	[A]	100/100	
Grid Side			
Rated output power	[kW]	30.0	50.0
Max.output apparent power	[kVA]	33.0 ¹⁾	55.0
Max.input apparent power**	[kVA]	36.0	60.0
Max.charging power of battery	[kW]	30.0	50.0
Rated AC voltage		3L/N/PE;220/380V;230/400V;240/415V	
Rated AC frequency	[Hz]	50/60	50/60
Max.output current	[A]	50.0 ²⁾	83.0
Power factor		0.8 leading...0.8 lagging	
Max.total harmonic distortion		<3%@Rated output power	
DCI		<0.5%In	<0.5%In
Back-up Side			
Rated output power	[kW]	30.0	50.0
Max.output apparent power	[kVA]	33.0	55.0
Max.output current	[A]	50.0	83.0
UPS switching time		<20ms	<20ms
Rated output voltage		3L/N/PE;220/380V;230/400V;240/415V	
Rated output frequency	[Hz]	50/60	50/60
Voltage harmonic distortion		<3%@Linear load	
Generator Side			
Max.input apparent power**	[kVA]	36.0	60.0
Max.charging power of battery	[kW]	30.0	50.0
Rated AC voltage		3L/N/PE;220/380V;230/400V;240/415V	
Pated AC frequency	[Hz]	50/60	50/60
Efficiency			
Max.efficiency		98.8%	98.8%
European efficiency		98.3%	98.3%
Protection			
DC reverse polarity protection		Integrated	
Battery input reverse connection protection		Integrated	
Insulation resistance protection		Integrated	
Surge protection		Integrated	
Over-temperature protection		Integrated	
Residual current protection		Integrated	
Islanding protection		Integrated	
AC over-voltage protection		Integrated	
Overload protection		Integrated	
AC short-circuit protection		Integrated	
General Data			
Over voltage category		PV:II Main:III	
Dimensions	[W×H×D mm]	800×620×300	
Weight	[KG]	72.0	
Protection degree		IP65	
Standby self-consumption	[W]	<15	
Topology		Transformerless	
Operating Temperature Range	[°C]	-30~60	
Relative Humidity	[%]	0~100	
Operating Altitude	[m]	3000 (>3000m derating)	
Cooling		Smart fan	
Noise Level	[dB]	<50	
Display		OLED & LED	
Communication		CAN,RS485,WiFi/LAN (Optional)	