

# VHT-8K/10K/12K-25-H

**15A**

Max. PV Input Current

**110%**

Unbalanced Output

**25A**

Max. Charge/Discharge

Residential | Three Phase | HV Battery | 2 MPPTS

## Features

### Maximized Energy Harvesting

- 150%CD oversizing boosts solar capture
- 110% unbalanced output enhances self-consumption
- Continuous 110% AC overloading sustains power
- 10ms UPS-level switch secures supply

### Engineered for Versatility

- Wide 135-750V range fits diverse batteries
- 200% max backup @60s handles overloads
- IP65 protects both indoors and outdoors
- Silent 25dB operation for comfort

### Intelligent Energy Dynamics

- Five work modes for diverse use
- SupperToU station management:supports flexible and customizable operation modes.
- 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-8K/10K/12K-25-H**  
**Hybrid Inverter**



# Technical Specifications

Mode		VHT-8K-25-H	VHT-10K-25-H	VHT-12K-25-H
PV Input				
Recommended Max.input power	[kW]	12.0	15.0	18.0
Start-up voltage	[V]	135	135	135
Max.DC input voltage*	[V]	1000*	1000*	1000*
Rated DC input voltage	[V]	620	620	620
MPPT voltage range*	[V]	200-950*	200-950*	200-950*
No.of MPP trackers		2	2	2
No.of DC inputs per MPPT		1/1	1/1	1/1
Max.input current	[A]	15/15	15/15	15/15
Max.short-circuit current	[A]	20/20	20/20	20/20
Battery Side				
Battery type		Lithium Battery (with BMS)		
Battery voltage range	[V]	135-750		
Maximum charging/discharge current	[A]	25/25		
Grid Side				
Rated output power	[kw]	8.0	10.0	12.0
Max.output apparent power	[kVA]	8.8	11.0 <sup>1)</sup>	13.2
Max.input apparent power**	[kVA]	16.0	16.5	16.5
Max.charging power of battery	[kW]	8.0	10.0	12.0
Rated AC voltage		3L/N/PE;220/380V;230/400V;240/415V		
Rated AC frequency	[Hz]	50/60	50/60	50/60
Max.output current	[A]	13.3	16.5 <sup>2)</sup>	20.0
Power factor		0.8 leading...0.8 lagging		
Max.total harmonic distortion		<3%@Rated output power		
DCI		<0.5%In	<0.5%In	<0.5%In
Back-up Side				
Rated output power	[kW]	8.0	10.0	12.0
Max.output apparent power	[kVA]	8.8	11.0	13.2
Max.output current	[A]	13.3	16.5	20.0
UPS switching time		<10ms	<10ms	<10ms
Rated output voltage		3L/N/PE;220/380V;230/400V;240/415V		
Rated output frequency	[Hz]	50/60	50/60	50/60
Voltage harmonic distortion		<3%@Linear load		
Efficiency				
Max.efficiency		98.2%	98.2%	98.2%
European efficiency		97.4%	97.4%	97.4%
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]	534×418×210		
Weight	[KG]	26.0		
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		Natural Convection		
Noise Level	[dB]	<25		
Display		OLED & LED		
Communication		CAN,RS485,WiFi/LAN (Optional)		