

**GS-HV-20K-40-H**  
**GS-HV-30K-100-H**  
**GS-HAV-50K-100-H**



**WARRANTY**

5+5 YEARS · T&C APPLIED

**Flexible Applications**

110% unbalanced output enhances self-consumption, max.10 pcs parallel for on-grid operation and max.4 pcs

**High Performance**

Max. 100A charging/discharging for efficiency energy transfer , 120% max backup @60s handles overloads

**Smart Control & Monitoring**

Multiple mainstream communication methods, supports remote OTA updates

**Safety & Reliability**

IP66 protection rating, performs reliably in complex environments

# Specification

Model	GS-HV-20K-40-H	GS-HV-30K-100-H	GS-HV-50K-100-H
<b>PV Input</b>			
Recommended Max.input power(kW)	30	45	75
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 ~850	200 ~850	200 ~850
No.of MPP trackers	4	4	4
No.of DC inputs per MPPT	2 + 2+2+2	2 + 2+2+2	2 + 2+2+2
Max.input current(A)	30×4	30×4	30×4
Max.short-circuit current(A)	40×4	40×4	40×4
<b>Battery Side</b>			
Battery type	Lithium Battery		
Battery voltage range(V)	135 ~750		
Maximum charging/discharge current(A)	100		
<b>Grid Side</b>			
Rated output power(kW)	20	30	50
Max.output apparent power(kVA)	22	33	55
Max.input apparent power(kVA)	30	36	60
Max.charging power of battery(kW)	20	30	50
Rated AC voltage	220/380, 230/400, 240/415, 3L/N/PE		
Rated AC frequency(Hz)	50/60		
Max.output current(A)	33.5	50	83
Power factor	-0.8 lagging ~ 0.8 leading		
Max.total harmonic distortion	< 3%		
<b>Back-up Side</b>			
Rated output power(kW)	20	30	50
Max.output apparent power(kVA)	22	33	55
Max.output current(A)	33.5	50	83
UPS switching time(ms)	10ms		
Rated output voltage	3L/N/PE; 220/380V; 230/400V; 240/415V		
Rated output frequency(Hz)	50/60		
Voltage harmonic distortion	< 3%		
<b>Generator Side</b>			
Maximum Apparent Input Power (kVA)	30	36	60
Rated Input Voltage (V)	3L/N/PE; 220/380V; 230/400V; 240/415V		
Input Voltage Frequency (Hz)	50/60		
Maximum Input Current (A)	45.4	54.5	90.9
<b>Efficiency</b>			
Max.efficiency(%)	98.8		
European efficiency(%)	98.3		
<b>Protection</b>			
Integration	DC Polarity Reverse Connection Protection, AC Output Overcurrent Protection, AC Output Overvoltage Protection AC Output Short Circuit Protection, DC Component Monitoring, Overvoltage Load Drop Protection, Ground Fault, Current Monitoring, Arc Fault Circuit Interrupter, Power Network Monitoring, Island Protection Monitoring, Earth Fault Detection, DC Input Switch		
Over voltage category	PV:II Main:III		
<b>General Data</b>			
Dimensions [W×H×D(mm)]	800× 620 × 300		
Weight(kg)	31	72	
Protection degree	IP66		
Standby self-consumption	< 40		
Topology	Transformerless		
Operating Temperature Range(°C)	-30 ~ 60		
Relative Humidity(%)	0 ~ 100		
Operating Altitude(m)	3000 (>3000m derating)		
Cooling	Smart fan cooling		
Noise Level(dB)	<65		
Display	LED+LCD		
Communication	RS485/CAN/WIFI /LAN		