

GHV3S 100kW/135kW

3S MODULE

BMS+PCS+EMS+HV Box
All-in-One



INTRODUCTION

GHV3S integrates BMS* (battery management system), PCS (power conversion system), EMS (energy management system) and HV (high voltage box) in one module. The self-developed design can realize an intelligent synergy of the product, improve safety performance, save hardware cost, increase conversion efficiency, shorten the development cycle, and reduce the difficulty of operation and maintenance.

*BMU modules are not included

ADVANTAGE



LOW COST

- All-in-one design reduces the size of the product
- Shorten development cycles and reduces comprehensive costs



HIGH EFFICIENCY & STABILITY

- Strategic integration of 3S ensures stability and fast response
- Unified system control improves overall stability



FLEXIBLE CONFIGURATION

- Satisfy the needs of multiple application scenarios
- Customized and flexibly matching with other ESS products



CONVENIENT O&M

- Intelligent collaboration improves O&M efficiency
- Self-developed products enhances the O&M convenience

EMS PLATFORM

The EMS platform is aimed to realize the centralized monitoring, operation and maintenance management. As an intelligent cloud platform, it provides data access of multiple energy storage sites based on unified collection and terminal control. The EMS is equipped with comprehensive functions such as real-time monitoring, data display, strategy control, operation analysis and revenue report analysis, contributing to a safe and long-term operation of C&I ESS with cost-reducing and efficient solution.



SPECIFICATION

Item	Description	GHV3S-P100U10F	GHV3S-P135U10F
Power supply	Rated power supply	220Vac	100~240Vac
	Power consumption	<200W (without load)	
System parameter	Maximum conversion efficiency	98%	
	Dimension (L*W*H) / weight	794*800*235mm / <82.55kg	794*1000*235mm / <100kg
	Cooling method	Air-cooling	
	Noise level	<75dB	
	Protection level	IP20	
Environment	Operating temperature / storage temperature / relative humidity	-20~+50°C / -40~+125°C / 0~95% (non-condensing)	
	Altitude	<3000m	
AC side	Rated AC power	100kW	135kW
	Wiring	3-phase 3-wire (on-grid mode), 3-phase 3-wire / 3-phase 4-wire (off-grid mode)	
	AC overload capacity	10% overload	
On-grid mode	Allowable voltage	380/400Vac (-15% ~15%)	400Vac (-10% ~15%)
	Allowable frequency	50Hz (-2.5~2.5)	50Hz (-0.5~0.5)
	Total harmonic current distortion	≤5%	
	Power factor	0.99 (-1~1)	(-1~1)
DC specification	Rated DC power	100kW	135kW
	Maximum DC current	169A	228A
	DC access channel	650~900V	650~950V
Communication	/	2-channel LAN, 3-channel CAN (2-channel CAN 2.0, 1-channel CAN FD), 4-channel RS485, 1-channel RS232, 2-channel fiber signal	
Output port	4-channel DO*L	Voltage range: 9~32Vdc	
		Current: 2.2A/single-channel at maximum and 1.1A continuously	
		Single-channel DO*L rated power: 26.4W	Single-channel DO*L rated power: 26.4W Dual-channel DO*L total rated power: 52.8W Four-channel DO*L total rated power: 105.6W
	Single-channel instantaneous power: 192W	Single-channel DO*L instantaneous power: 192W Dual-channel DO*L instantaneous power: 384W Four-channel DO*L instantaneous power: 768W	
	4-channel dry contact output	Voltage: 24Vdc/1A Electrical isolation: 3000Vdc	
7-channel DI*L and 2-channel passive DI	Low voltage range: <0.5VDC		
Storage	Storage / internal memory / port	8GB/ 2GB / 1-channel USB port (USB2.0)	