

PV-Storage-Genset Microgrid All-in-One Integrated Unit

HEXSTS64-128kWh-400-A



Outdoor Integrated Design

Fully Integrated System: MPPT controllers are directly mounted onto PV mounting structures, eliminating separate enclosures.

Environmental Resilience: Outdoor-rated protection (IP65), operational in temperatures from -25°C to 60°C.

Easy Installation: Integrated mounting reduces cabling, cutting installation costs by 30%.



Precise DC-Side Monitoring & Control

String Voltage/Current Monitoring: Module-level fault identification, isolating abnormal strings within 15 minutes.

Real-Time Generation Power: Limited power regulation, flexible output control to meet grid dispatch requirements.

Equipment Operating Status: Predictive maintenance with fault warnings based on temperature/impedance changes.



Dual-Line Converged Communication

Power Transmission: DC cables handle energy transfer with >97% conversion efficiency.

Data Exchange: Big data analysis of module performance, remote parameter configuration & firmware updates, second-level response to grid dispatch commands.



System-Level Safety Protection

Electrical Safety: DC-side insulation monitoring + reverse power flow protection.

Communication Security: RS485 opto-isolation + encrypted data transmission.

Operational Safety: Automatic isolation of faulty strings without impacting overall system operation.



Peak Shaving



Arbitrage



Backup Power



Grid Services

Model	HEXSTS64-128kWh-400-A
DC Battery	
Cell Type	LFP 314 Ah
Battery Pack Capacity and configuration	16.077kWh/1P16S
Battery capacity/Pack quantity	128kWh / 8, optional 112 kWh / 7
Battery voltage range	359V~461V
Rated charge and discharge rate and current	0.5C, 157A
Cycle index	8000cls (0.5P, 25±2°C, @70%SOH)
Temperature monitoring number	64
Low voltage side voltage range	150V~1000V
The DC/DC Module	
Low voltage side full power minimum voltage	340V
Rated current	180A
Rated power	64kW
Maximum input power	100kW
PV DC side	
Maximum input power	160A
Voltage range/System bus voltage	650V~800V
Input switch	250A/1000Vdc/2P, one PV MPPT controller can be connected
AC rated power	64kW
AC side(Grid-connected)	
AC maximum power	70.4kW
Rated current	92A
THDi	<3%
DC Component	<0.5%lpn
System Voltage Configuration	3W+N+PE
Voltage Range	360VAC~440VAC
Frequency Range	45~55Hz/55~65 Hz
Power Factor	-1~1
Rated Output Powe	64kW
AC side (Off-grid)	
Maximum single-phase output power	30kW
Rated Output Voltage	400V
Rated Output Frequency	50/60 Hz
THDu	<3%
Overload Capability	110% overload for 10 min
Bypass Maintenance Switch	125A/400Vac
Distribution and switching time	
Load Switch	125A/400Vac
Grid Switch	50A/400Vac
STS Switch	144A/100kW
Switching Time	<20ms
Factory SOC set value	30%-50%
Maximum System Efficiency	≥90%
System	
Cooling Concept	Intelligent air cooling
Operating Temperature	-30~55°C (derating use over 40 °C)
Relative Humidity	0 ~ 95% RH, non-condensing
Dimensions	1050(W)*1050(D)*2050(H)mm
Weight	1450kg
IP Grade	(Complete machine) IP54
Noise	<70dB
Networking Methods	4G / Wifi / Ethernet TCP / IP
Fire Protection	Aerosol
Display Screen	LCD touch
Diesel generator connection	
Grid feedback input	220Vac
Diesel engine drive output	Dry node
Other parameters	
Related certificates of integrated machine	CE/UN38.3/MSDS/Sea and Land Transportation Certificate/Dangerous Goods Identification Report