

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

HEXSTS30-72kWh-400-A
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

型号		HEXSTS30-72kWh-400-A
DC Battery		
Cell type		LFP 100Ah
Battery Pack capacity and configuration		10.24 kWh / 1 p32s
Battery capacity /Pack quantity		72kWh/ 7
Battery voltage range		627.2V - 806.4V
Rated charge/discharge rate and current		0.5C, 50A
Cycle index		6000cls (0.5P, 25±2 ° C, @70%SOH)
Number of temperature monitorings		112
PV DC Side		
Maximum photovoltaic row voltage		806V
MPPT voltage range		200V~806V
Full-load MPPT voltage range		520V~806V
Maximum branch current		20A
Number of PV branches		4
Number of MPPTS		2
Current per MPPT		32
AC Side		
AC rated power		30kW
AC maximum power		33kW
THDi		<3%
DC component		< 0.5% LPN
System voltage system		IT400V
Voltage range		360VAC~440VAC
Frequency range		45~55Hz/55~65Hz
Power factor		-1~1
System		
Factory SOC set values		30% - 50%
Switching time		< 10ms
Maximum system efficiency		≥89%
IP grade		Whole machine IP54
Cooling method		Smart air cooling
Operating temperature		-30 to 55 ° C (derating above 40 ° C)
Relative humidity		0 to 95%RH, no condensation
Dimensions		900(W)*900(D)*1850(H)mm
Weight		1050kg
Noise level		Noise level <65dB
Networking		4G/WiFi/ Ethernet
Diesel generator connection		
Grid feedback input		220Vac
Diesel engine drive output		Dry node

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

Model		HEXSTS64-128kWh-400-A
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%Ipn
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	