



Energy Storage System

*Forge ahead with innovation,
strive for excellence.*

ESS Products

125KW/261KWH ESS



Model: ESS261-01

PRODUCTS

Advantages
Supports PV input up to 250kW, maximising solar utilisation
Delivers 120% overload for 60s in off-grid mode, ensuring stable startup of heavy loads
Offers flexible control for weak grid and genset-hybrid scenarios, reducing investment costs
Smart remote control, AI optimisation, and instant troubleshooting - all in one platform
Integrates PV and storage for demand management and anti-reverse flow functions
Provides dynamic reactive power compensation to improve grid power factor and reduce reactive power charge
Supports AC coupling for flexible retrofits and system expansions, multi-unit parallel operation up to 1250kW (Torphan STS cabinet recommended for systems over 6units)
Ensures reliable backup power across diverse scenarios through battery reserve management
Extends supply time for critical loads with intelligent load prioritization
Offers a versatile three-in-one interface for seamless integration of on-grid PV, wind power, and diesel generators
Achieves on- and off-grid transitions in less than 10ms, ensuring an uninterrupted power supply
Multistage protection Design from Pack-Battery Rack- Energy Storage System

125KW/261KWH ESS specification Model: ESS261-01

Battery	
Battery capacity	261KWH
Battery material	LiFePO4
Number of battery racks	1
BMS communication interface	RS485/CAN
DC voltage range	728~936Vdc
Max DC current	200A
DOD	90%
Working Temperature	Charging: 0~50°C
Cooling mode	Liquid cooling
Input DC (PV side)	
Max. usable PV input power	250KW
Max. input voltage	1000V
Rated voltage	600V
Start-up voltage	180V
MPPT voltage range	150~950V
Max. input current	10*42A
Max. short circuit current	10*60A
MPPT number / Max. input strings number	10
Max input power per MPPT	25KW
Output AC (ON-grid)	
Rated AC power	125KW
Max. apparent output power	1.1 times long-term / 1.2 times for 1min
Rated grid voltage	380 (-15%~15%) Vac
Rated grid frequency	50/60Hz
Power factor	> 0.99 (0.8 leading - 0.8 lagging)
THDi	< 3%
Input AC (ON-grid)	
Max. AC passthrough current	250A
Rated input voltage	3/N/PE, 380V
Rated input frequency	50/60Hz

Input AC (Generator)	
max AC power	125KW
Rated input current	180A
Rated input voltage	3/N/PE, 380V
Output AC (Back-up)	
Rated output power	125KW
Max. apparent output power	1.1 times long-term / 1.2 times for 1min /
Back-up switch time	<20ms
Rated output voltage	380 (-15%~15%) Vac
Rated frequency	50/60Hz
Max. imbalance power per phase	100%
THDv (@linear load)	< 3%
Efficiency	
Max. efficiency	97.20%
Battery efficiency	97%
protection	
Protection degree	IP54
Ground fault detection	yes
Integrated AFCI	Yes
DC reverse-polarity protection	Yes
Grid AC switch	Yes
Load Switch	Yes
Rapid shutdown (EPO)	Yes
Fire fighting system	Yes
General information	
Topology	Transformerless
Working Temperature	-20°C~+60°C
Dimension(W*D*H)	1.5*1.4*2.2m
Weight	3000KGS
Communication mode	Modbus RUT,RS485, CAN , TCP/IP
Max. altitude	4500 m (derated over 2000m)
Relative humidity	0-95% non-condensing