



FlexCube-E

Series Product Overview

Application Scenarios

Ideal for off-grid or weak-grid areas such as construction sites, mines, islands, fishing villages, grasslands, and deserts lacking reliable grid power. The diesel-hybrid energy storage system serves as an independent power supply. When under load, the energy storage system works together with the diesel generator to significantly reduce diesel consumption and improve power supply stability.

Abundant Interfaces

Features a standard 400A single-core PowerLock quick-connect input/output interface for high-power applications and a 125A five-core quick-connect input interface for rapid charging and efficient deployment. Offers a variety of AC output interfaces: AC 380V 63A/32A/16A sockets for powering small construction machinery. Customizable socket options are available.

Proven System Reliability

Dual redundancy with energy storage + diesel. Total battery system capacity of 522/784 kWh (using CATL battery cells). Adapts to complex energy demands.

Flexible Product Transport

Designed to fit a standard 10-foot shipping container for easy transportation. After use at one site, it can be easily transported to the next location for deployment.

Multiple Power Control Modes

The system supports VF, PQ, and VSG modes to meet the power support requirements of complex field operations.

Liquid Cooling

Employs liquid-cooled battery packs. Liquid cooling offers superior temperature uniformity and heat dissipation efficiency compared to air cooling, enabling high-rate operation and extending lifespan. The IP67 rating ensures performance in harsh environments, including high temperatures, humidity, and dust.

FlexCube-E Series Product Specifications

Model	FlexCube-EL-250 kW/466 kWh	FlexCube-EL-500 kW/699 kWh
Basic Parameters		
System Capacity	250 kW/466 kWh	500 kW/699 kWh
System Wiring	3W+N+PE	
Grid-Connected Mode		
Rated Output Power (kVA)	250	500
Rated Output Current (A)	361	722
Grid Voltage (Vac)	400 (±15%)	
Grid Frequency (Hz)	50±5/60±5	
THDi	≤ 3%	
THDu	1%	
Power Factor	0.99/-1~1	
Rated Input Power (kVA)	250	270
Rated Input Current (A)	390	
Off-Grid Mode		
Rated Output Voltage (Vac)	400	
Rated Output Frequency (Hz)	50/60	
Grid/Off-Grid Switching Device	Present	
Human-Machine Interaction		
Interaction Method	Cloud Platform/Touch Screen	
Battery Parameters		
Discharge Rate	0.6C	0.8C
Battery Pack Assembly	2P260S/2P260S	3P260S/3P260S
Total System Capacity	466kWh	699kWh
System Rated Voltage	832 V	
Cell Type	LFP	
Cell Capacity	280Ah	
Cell Rated Voltage	3.2V	
Operating Voltage Range	728~936V	
Operating Temperature Range	Charging 0°C ~ 50°C, Discharging -20°C ~ 50°C	
Matching Diesel Generator/Grid Parameters—Slow Charging Port		
Wiring Method	3W+PE	
Input Voltage (Vac)	323~486	
Input Frequency (Hz)	45~65	
Power (kW)	40/80	
Matching Diesel Generator/Grid Parameters—Fast Charging Port		
Wiring Method	3W+N+PE	
Input Voltage (Vac)	400 (±15%)	
Input Frequency (Hz)	50±5/60±5	
Power (kW)	250	270
System Parameters		
Noise @ 1m horizontal	< 75dB	
Dimensions (WxHxD) (mm)	2438*2591*2991	
IP	IP54	
Weight (kg)	9000	11000
Allowed Altitude	2000 m	
Communication Interface	Ethernet, RS485, CAN	

*Smaller input sources can be used, but this will result in slower charging speeds.