

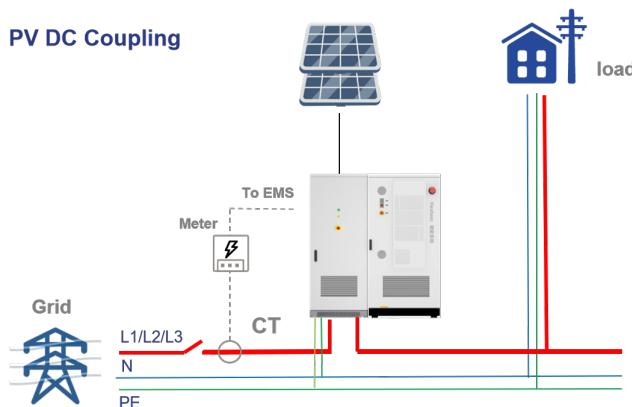
M215 Series

Flex BESS Battery Cabinet



■ Introduction

The M215 series is an **outdoor energy storage system** specifically designed for **industrial and commercial applications**. It is configured with side cabinets that can integrate MPPT, ATS, and transformers, supporting both grid-connected and off-grid applications. The M215 can be paralleled with up to 10 units through master-slave cabinet configuration, and the maximum energy storage system can reach 2.15 MWh.



■ Application (with PCS)

- Back up power for frequent mains outages
- PV Self-consumption
- Peak shaving
- Power expansion
- On-Off grid

■ Simply & Easy Operation

- Fully integrated for plug and play on site to reduce costs
- Fan cooling pack facilitates maintenance

■ SMART AND ROBUST

- Deep, thorough insights into battery, PCS and system data facilitate alarm management and maintenance with a innovative communication middleware
- Near-distal intelligent wireless operation and one-key remote upgrade, to provide boundless service

■ SAFE AND RELIABLE

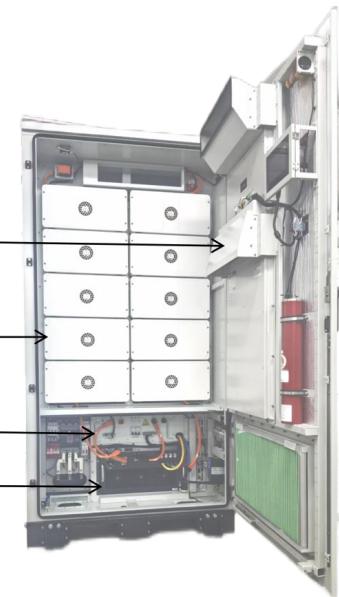
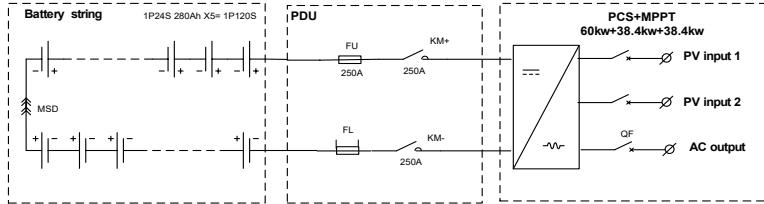
- The **Solid-insulated pack** provides strong electrical safety
- PACK, RACK ,PCS (3th party) three-level over current protection
- Air condition cooling extends battery life
- **Dual auxiliary powers** provide a black start

Technical data	FlexBESS M215-E	FlexBESS M215-E-6107
DC side		
Cell type	LFP 3.2 V / 280 Ah	
System battery configuration	1P240S	1P120S
Nominal capacity	215kwh	107.5kWh
Nominal voltage range	672V--768V--876V	336V--384V-438V
AC side (on-grid)		
Nominal power	100 kW	60kw
Nominal voltage	400 V	3P+N+PE
Voltage range	340 V ~ 440 V	
Nominal frequency	50 Hz / 60 Hz	
Frequency range	45 Hz ~ 55 Hz / 55 Hz ~ 65 Hz	
Max.THD of current	< 3 % (Nominal power)	
Power factor range	1.0 leading ~ 1.0 lagging	
AC side (off-grid) *		
Nominal voltage	400 V	
Nominal frequency	50 Hz / 60 Hz	
Max.THD of voltage	< 3 % (Linear load)	
Unbalance load capacity	100 %	
PV side (optional)		
Max Power	63kW+63kW	38.4kW+38.4kW
PV Max voltage	900V	
start Voltage	0V	
MPPT voltage range	438V-900V	
Max current	160A + 160A	64A+64A
System parameter		
PCS efficiency	99%	
System efficiency (charge or discharge)	92%	
Dimensions (W * H * D)	110 mm * 2200 mm * 1495 mm	
Weight	2200kg (without side box)	
Degree of protection	IP54	
Auxiliary power supply	Internal DC	
Anti-corrosion degree	C3 (Default)	
Operation humidity range	0 % ~ 100 %	
Operation temperature range	-30 °C ~ 50 °C (> 45 °C derating)	
Max. operating altitude	3000 m	
Temperature control method	Forced air cooling	
Noise	≤ 70 dB (A) @ 1m	
Fire suppression system	Smoke detector, Heat detector, Alarm sounder (Gas detector and explosion vent window optional)	
Communication interface	Ethernet	
Communication protocol	Modbus TCP	
Standard	IEC 62619, IEC 62477, IEC 61000, UN 38.3	

Note: The product pictures are for reference only. Configurations vary by region, and changes to the actual product will not be notified separately.

■ FlexBESS M215-E

The FlexBESS M215-E requires a side bay to be configured to have on-grid/off-grid switching and MPPT functions. A stand alone energy storage cabinet consists of a battery pack, Power Conversion System (PCS), DC Power Distribution Unit (DC-PDU), air conditioning, and fire protection system

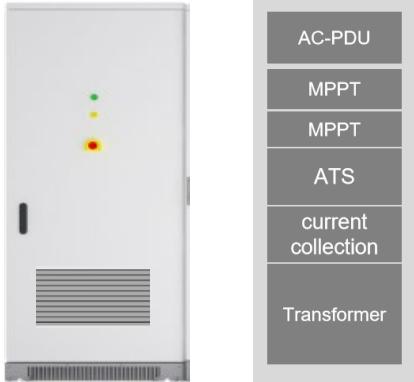


■ Side-bay

● On-grid /Off-grid transfer

With the side-bay cabinet, the system can support the on/off grid function:

- On-off grid transfer control via EMS
- Transfer time > 30ms (via contactor)
- The side-bay is a customized product based on the system configuration



● Function of the side-bay

- Basic Function: Current collection
- Optional Functions: MPPT, ATS, Transformer
- Master Side-Bay Integration: MPPT + ATS + Transformer
- MPPT: 50kW/63kW (1-4 modules optional)
- ATS: Ensures reliable output
- Transformer: Withstands impact loads
- ATS for GEN and Grid: Automatic transfer between generator and grid

■ Parallel

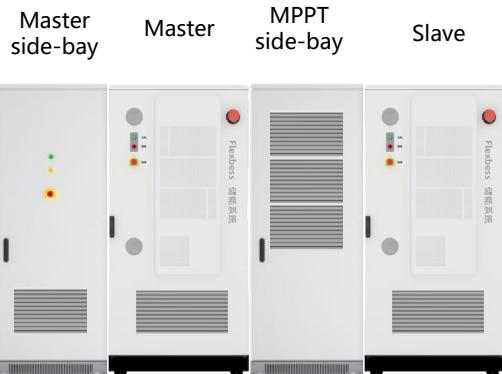
With the side-bay cabinet, the system can parallel to 10 sets the side-bay act as a master distribution cabinet

FlexBESS C2-M215-E-M

As a master BESS to control the slave BESS, communication with the upper controller or cloud.

FlexBESS C2-M215-E-S

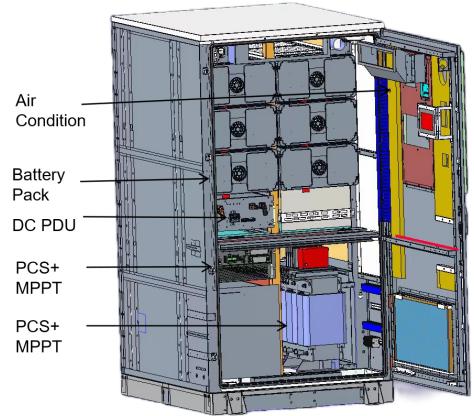
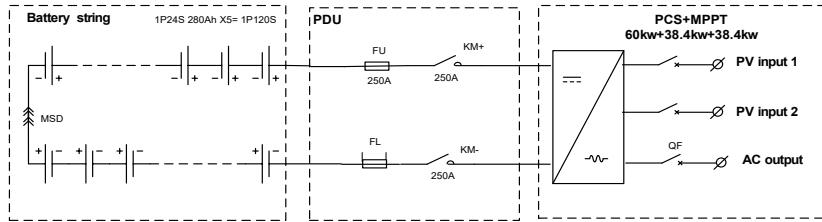
As a slave BESS to control by the master controller with the power balance.



TYPE\Parallel number	1	2	3	4	5	6	7	8	9	10
FlexBESS C2-M215-E-M	1	1	1	1	1	1	1	1	1	1
FlexBESS C2-M215-E-S	0	1	2	3	4	5	6	7	8	9
Output power (kw)	100	200	300	400	500	600	700	800	900	1000
Energy capacity (kWh)	215	430	645	860	1075	1290	1505	1720	1935	2150

■ FlexBESS M215-E-6107

The FlexBESS M215-E-6107 is an energy storage system that can integrate MPPT, grid-connected/off-grid switching, and a transformer. Its internal components include a battery pack, PCS+MPPT, DC-PDU, and air conditioning, with the transformer being optional.

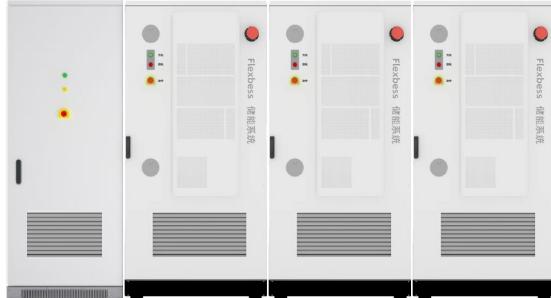


7

■ Parallel

With the side-bay cabinet, the system can parallel to 10(for off-grid)/20 sets(for on-grid), the side-bay act as a master distribution cabinet .

- use the side-bay with the current collection function, ATS function and Transformer function
- the MPPT function integrated in the BESS



■ side-bay is a custom-made product

The side-bay is a custom-made product for customers, and its functions are determined by its configuration.