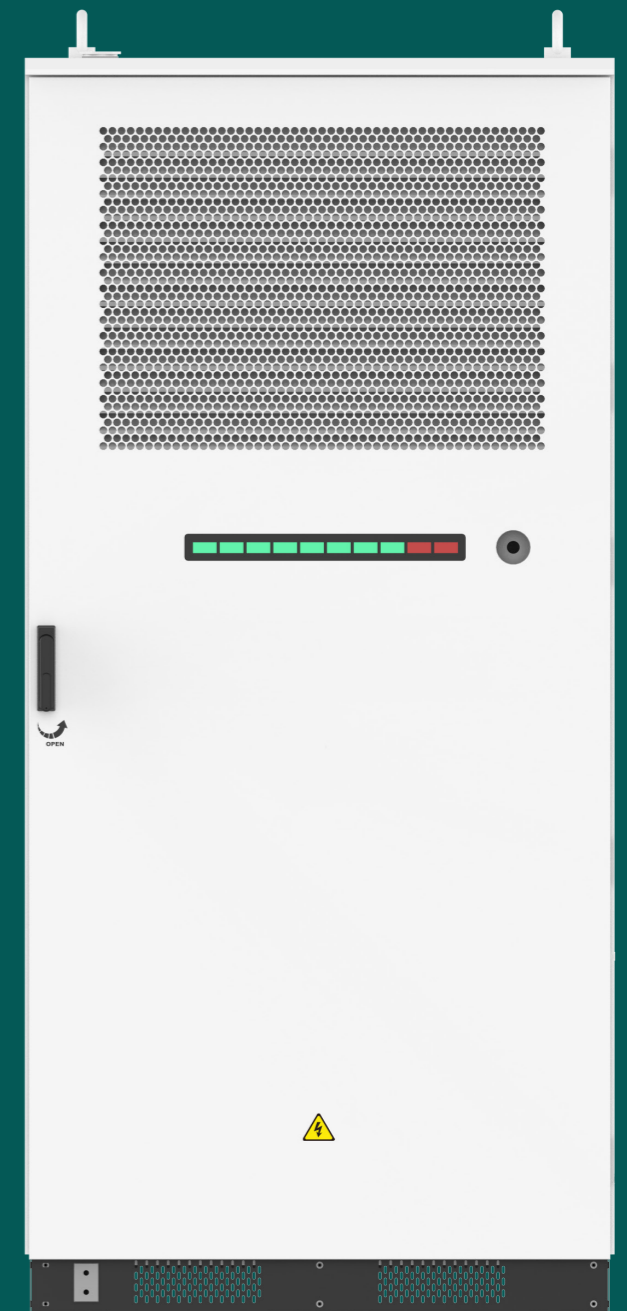


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# Emaldo® EM-B100 & EM-B125

## *Specifications*



An intelligent energy storage system with advanced fire protection, battery monitoring and active balancing for safe and reliable performance. Supports on-grid and off-grid operation, smart energy optimisation and cloud-based monitoring for efficient control and maintenance.

# Emaldo® EM-B100 & EM-B125

## Specifications

### Battery Parameters

Model	EM-B100	EM-B125
Cell and Capacity	LiFePO4 – 314Ah	LiFePO4 – 314Ah
Charge/Discharge Rate	0.5P@25°C	0.5P@25°C
Battery Module Type	1P52S*4S	1P52S*5S
System Capacity Range	209kWh	261kWh
System Efficiency	Annual Comprehensive RTE ≥88%	Annual Comprehensive RTE ≥88%

### AC Side On-grid Parameters

Model	EM-B100	EM-B125
Grid Type	3L/N/PE	3L/N/PE
Rated Power	100kW	125kW
Rated Voltage	AC 400V	AC 400V
Grid Voltage Range	±15%	±15%
Freq. Range	50Hz	50Hz
Rated Current	160A	180A
Harmonics	≤3% (@Rated Power)	≤3% (@Rated Power)

### AC Side Off-grid Parameters

Model	EM-B100	EM-B125
Grid Type	3L/N/PE	3L/N/PE
Rated Power	100kW	125kW
Freq. Range	50Hz	50Hz
Rated Voltage	AC 400V	AC 400V

The EM-B100 and EM-B125 are intelligent energy storage systems designed for safe, efficient and flexible energy management. Featuring three-level fire protection, advanced health monitoring and active battery balancing, they ensure reliable operation and extended battery life. With modular design, cloud-based diagnostics and 24/7 smart monitoring, they deliver optimized energy performance, simplified maintenance and scalable operation.

### Environmental Parameters

Model	EM-B100	EM-B125
Operating Humidity	0–95% (no condensing)	0–95% (no condensing)
Operating Temperature*	-20°C~50°C	-20°C~50°C
Operating Altitude**	3000m	3000m

### System Parameters

Model	EM-B100	EM-B125
Ingress Protection	IP54 (PACK IP65)	IP54 (PACK IP65)
Anti-Corrosion Grade	C3	C3
Cooling	Liquid Cooling	Liquid Cooling
Communication Interface	RS485, Ethernet, CAN	RS485, Ethernet, CAN
Protocol	Modbus RTU, Modbus TCP/IP, CAN2.0	Modbus RTU, Modbus TCP/IP, CAN2.0
Parallel Operation Units	On-grid: 20 units; Off-grid: 12 units	On-grid: 20 units; Off-grid: 12 units
Firefighting System	Cabinet-level aerosol + Perfluorohexone PACK-level Fire Suppression + Water-based Fire Protection	Cabinet-level aerosol + Perfluorohexone PACK-level Fire Suppression + Water-based Fire Protection
Cycle Life	≥8000 @25 ±3°C, 0.5P, 95%DOD, 80%SOH	≥8000 @25 ±3°C, 0.5P, 95%DOD, 80%SOH
Standards	GB/T36276, IEC62619, IEC62477, IEC61000, UN38.3	GB/T36276, IEC62619, IEC62477, IEC61000, UN38.3
Dimension (H+W+D)	2350+1100+1400 mm	2350+1100+1400 mm
Weight	2.33 tons	2.65 tons
Noise Emission	≤80dB	≤80dB
SKU	CI-EM-B100-01	CI-EM-B125-01

\* Derating Due to Overtemperature > 45°C

\*\* Derating Due to High Altitude ≥ 2000m