

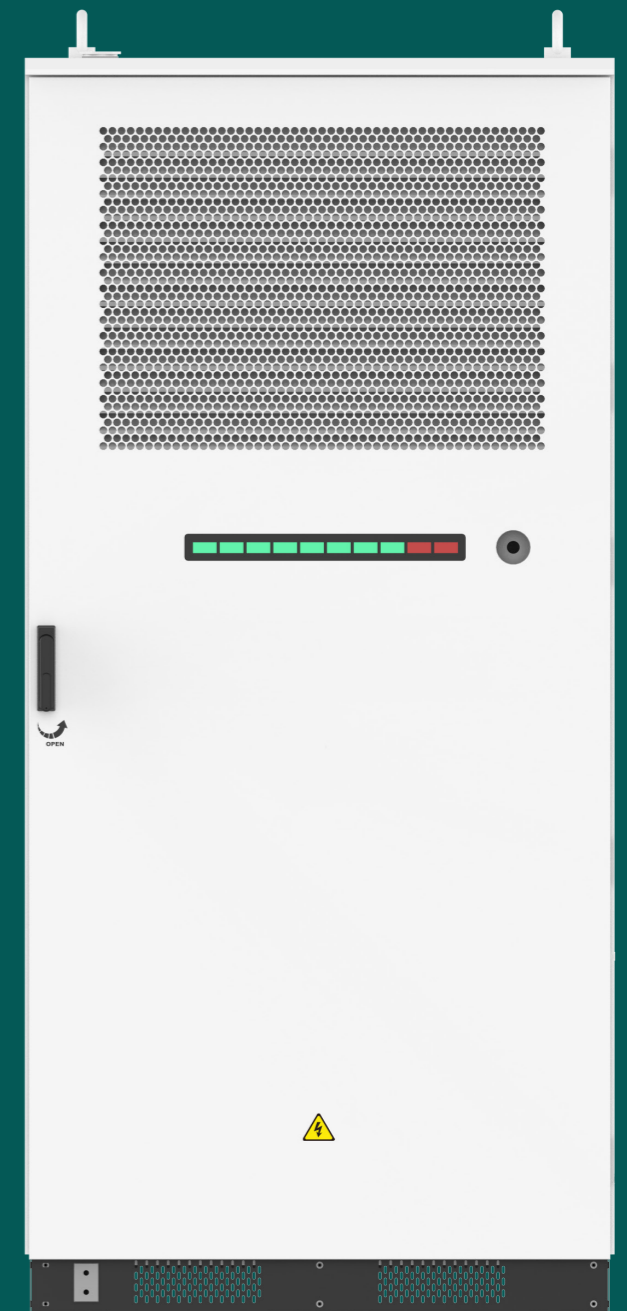


emaldo<sup>®</sup> one  
/business



# Emaldo<sup>®</sup> EM-H100 & EM-H125

## *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-H100 & EM-H125

## Specifications

### Battery Parameters

Model	EM-H100	EM-H125
Cell and Capacity	LiFePO4 – 314Ah	LiFePO4 – 314Ah
Battery Module Type	1P52S*4S	1P52S*5S
System Capacity Range	208.99 kWh	261 kWh
System Efficiency	Annual Comprehensive RTE ≥ 88%	Annual Comprehensive RTE ≥ 88%

### AC Side On-grid Parameters

Model	EM-H100	EM-H125
Grid Type	3L/N/PE	3L/N/PE
Rated Power	100 kW	125 kW
Rated Voltage	AC 400V	AC 400V
Grid Voltage Range	± 15%	± 15%
Grid Freq. Range	50 Hz	50 Hz
Rated Current	144A	180A
Harmonics	≤ 3% (@ Rated Power)	≤ 3% (@ Rated Power)

### AC Side Off-grid Parameters

Model	EM-H100	EM-H125
Grid Type	3L/N/PE	3L/N/PE
Rated Power	100 kW	125 kW
Rated Voltage	AC 400V	AC 400V
Grid Freq. Range	50 Hz	50 Hz

### PV-Side Parameters

Model	EM-H100	EM-H125
Max. PV Input Power	100 kW	100 kW
MPPT Voltage Range	200~1000V	200~1000V
Max. DC Input Current	45A * 8	45A * 8
Maximum DC Short-Circuit Current	56.5A * 8	56.5A * 8
Freq. Range	50 Hz	50 Hz
Rated Voltage	3L/N/PE AC 230/400V	3L/N/PE AC 230/400V
PV Inverter Efficiency	98.8% max	98.8% max

This intelligent energy storage system is designed for safe, efficient and flexible energy management. Featuring three-level fire protection, AI-based health monitoring and active battery balancing, it ensures reliable long-term performance. The system supports both on-grid and off-grid operation, intelligent charge and discharge optimisation, and modular cloud-based monitoring for efficient maintenance and real-time diagnostics.

### Environmental Parameters

Model	EM-H100	EM-H125
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 Efficiency	Annual Comprehensive RTE ≥ 88%	Annual Comprehensive RTE ≥ 88%

### System Parameters

Model	EM-H100	EM-H125
Ingress Protection	IP54	IP54
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
Dimension (H+W+D)	2350+1100+1715 mm	2350+1100+1715 mm
Weight	2400 ± 50 kg	2700 ± 50 kg
Noise	≤ 80dB	≤ 80dB
SKU	CI-EM-H100-01	CI-EM-H125-01

\* Derating Due to Overtemperature > 45°C

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