

E22

ENERGY
STORAGE
SOLUTIONS

LI-ION
300/600 kW



300/600 kW 1000 kWh

Lithium Ion Battery

Our economical, safe and long-lasting product for a wide range of applications. The E22 Li-ion battery is a containerized plug & play solution, totally equipped and guaranteed for over 4.000 cycles life.

Lithium Ion technology

- Chemistry: The LFP lithium battery cells employed in our systems are characterized by its high specific energy, over 4000 cycle life, low cost and safe and pollution-free. **This technology is widely used in energy storage systems.**
- Battery Management System (BMS) main protection functions include:
 - *Over-charge protection*
 - *Over-discharge protection*
 - *Over-temperature protection*
 - *Over-current protection*
 - *Ground-fault detection*
 - *Internal battery fault detection*
 - *Cell balancing*
- Fire suppression system with two control methods: automatic and electrical manual. Each protected area is equipped with two independent detection circuits.

Distinguishing features are:

- Safe and reliable performance
- Modular design, easy to transport, install, maintain and system expansion
- Short construction period
- Low maintenance cost and unmanned operation

A turnkey package in secured weatherproof enclosure:

- Low life cycle cost
- Reliable and safe LFP lithium ion technology
- Modular design, easy to transport, install, maintain and expand
- Fire suppression System with UL, FM certification
- Standard 3-level battery management system (BMS)
- Various balancing means to extend battery life

Applications

- Integrated operation with Renewable energy generation
- Demand charge management
- Diesel offset
- Peak shaving
- Energy shifting
- Microgrid and back-up power

POWER	RATING	
European Standard	300 kW	600 kW
American Standard	200-350 kW	400-700 kW
Energy	800-1,000 kWh	
Maximum current (DC)	500 A	2 x 500 A
Voltage range		
European Standard	610-820 V	
American Standard	670-820 V	
Communication interface	Modbus	
Chemistry	LFP	
DC DC efficiency *	87%	
Self discharge	< 0.1%/day	
Working temperature	-20°C to 50°C	
Altitude **	<2,000 m	
Volume	20 feet HC container	
IP Level	IP 54	
Warranty	4000 cycles, 10 years	
Standards	UN38.3, ISO9001, ISO14001, ANSI/IEEE Standard C2-2007	

* Battery system only

** (No derating)



Our products are designed to deliver the lowest total cost of energy (LCOE) along with industry leading reliability.

About E22

E22 Energy Storage Solutions is a part of the Group Gransolar group of companies with an extensive global presence.

As a part of our vision we provide total energy solutions, integrating Photovoltaic (PV) power generation with energy storage, project engineering and energy management.

To guarantee our reliability and quality and underpin "bankability", **E22** products have been verified by third-party certification entities together with a flexible supply chain, and our inhouse fabrication facility.

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