

514.45kWh High Voltage Battery Energy Storage System

Commercial & Industrial Energy Storage Solution

LiFePO4 Technology

High Safety

Modular Design

Intelligent BMS

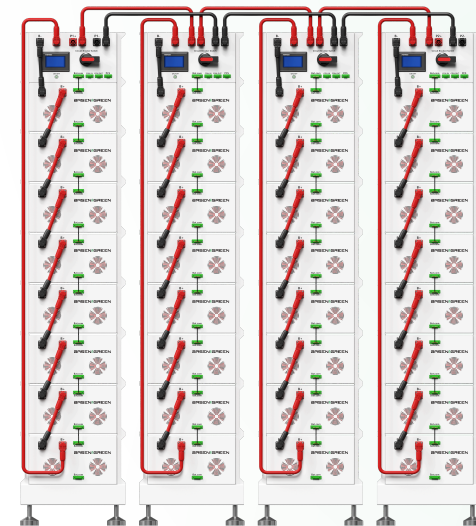
CAN Communication

6000+ Cycles

Scalable Architecture

C&I Energy Storage

Shenzhen BASENGREEN Technology Co., Ltd.



514.45kWh System Configuration

Rack #1
128.6kWh

Rack #2
128.6kWh

Rack #3
128.6kWh

Rack #4
128.6kWh

Total System Energy: 514.45kWh

Battery Module Specification



51.2V 314Ah Module

Parameter	Specification
Battery Chemistry	LiFePO4
Model	51.2V314Ah
Configuration	16S1P
Nominal Voltage	51.2V
Nominal Capacity	314Ah
Nominal Energy	16.076kWh
Dimensions	425x765x235mm
Weight	123kg

High Voltage Control Box



BMS Control Box

Parameter	Specification
Communication	CAN Bus
Display	4.3-inch Touch Screen
Max Charge Current	300A
Max Discharge Current	300A
Dimensions	425x765x245mm
Weight	25kg

* Specifications subject to change. Contact BASENGREEN for latest info.

Single Battery Rack

Parameter	Specification
Model	409.6V314Ah
Battery Chemistry	LiFePO4
Nominal Voltage	409.6V
Operating Voltage Range	345V - 467V
Nominal Capacity	314Ah
Nominal Energy	128.614kWh
Maximum Charge Current	300A
Maximum Discharge Current	300A
Dimensions	765x505x2295mm
Weight	1110kg

Rack Composition

Each rack: **8 modules** (51.2V 314Ah) in series = 409.6V + **1 HV BMS box**.

Key Features

- ✓ High energy density LiFePO4 cells
- ✓ Built-in BMS with full protection
- ✓ Front access for easy maintenance
- ✓ CAN bus for system integration



Single Battery Rack (128.614kWh)

System Specifications

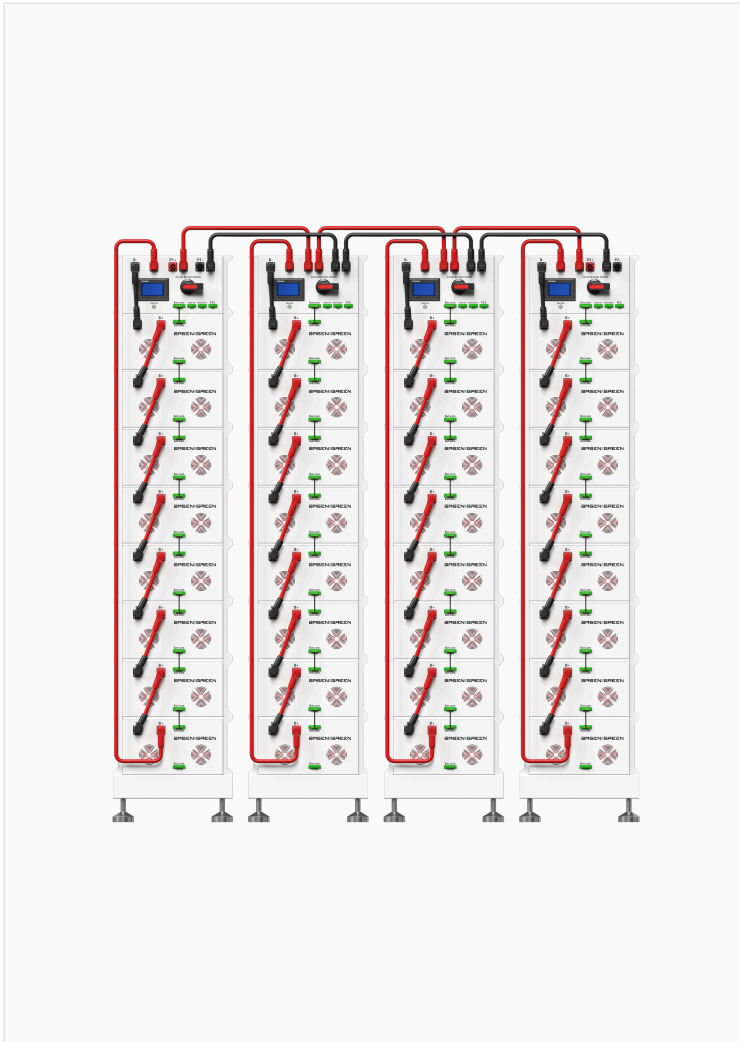
Parameter	Specification
Model	409.6V1256Ah
Battery Chemistry	LiFePO4
Nominal Voltage	409.6V
Nominal Capacity	1256Ah
Nominal Energy	514.45kWh
Number of Battery Racks	4
Maximum Charge Current	300A
Maximum Discharge Current	300A
Total Weight	4440kg

Environmental Specifications

Parameter	Specification
Charging Temperature	0°C ~ 55°C
Discharging Temperature	-10°C ~ 60°C
Protection Rating	IP21
Recommended Temperature	20°C ~ 25°C

System Overview

4 parallel racks, each with 8 LiFePO4 modules + BMS. Total: **514.45kWh** at **409.6V**.



Complete System - 4 Racks (514.45kWh)

Protection Functions

- ✓ Overcharge Protection
- ✓ Over-discharge Protection
- ✓ Overcurrent Protection
- ✓ Short Circuit Protection
- ✓ Over-temperature Protection

Monitoring Functions

- ✓ Cell Voltage Monitoring
- ✓ Current Monitoring
- ✓ Temperature Monitoring
- ✓ SOC Monitoring
- ✓ Historical Event Logging
- ✓ Alarm Recording

Communication

- ✓ CAN Bus
- ✓ 4.3-inch Touch Screen
- ✓ Real-time Monitoring

Reliability & Certification

Cycle Life	≥6000 @ 0.5C/0.5C, 25±2°C
Certification	CE
Chemistry	LiFePO4

Compatible Inverters

- Deye
- Pylontech Protocol
- Growatt
- Megarevo
- Solis
- INVT
- Hopewind
- Sofar Solar
- SMA

Typical Applications

- Commercial ESS
- Industrial ESS
- Solar + Storage
- Peak Shaving
- Load Shifting
- Backup Power
- Microgrid
- Telecom Backup