Battery Energy Storage Systems (BESS)

Engineered for commercial, industrial and mission-critical applications, Cummins BESS solutions support the growing demand for continuous, reliable and sustainable power with zero emissions.

Key Advantages

- Reduced carbon emissions and reliance on fossil fuels
- Manage the complexities of integrating renewable energy
- Improved resiliency
- Backup power during outages
- Energy cost savings and arbitrage
- High energy density
- Easy plug-and-play installation
- Meets or exceeds all major international requirements

Use Cases

- Backup power
- Off-grid power
- Energy arbitrage
- Peak shaving
- Renewable energy shifting
- Electric vehicle (EV) charging infrastructure
- Demand response and load management
- Microgrids

Engineered for Mission-Critical, Commercial and Industrial Sites

Off-Grid	Energy Management	Resiliency
▪ Remote Communities	▪ Manufacturing / Industrial Sites	▪ Data Centers
▪ Mining	▪ EV Charging Infrastructure	▪ Healthcare Facilities
▪ Oil and Gas	▪ Commercial Properties	▪ Commercial Properties
▪ Remote Industrial	▪ Universities / Research Institutes	▪ Public Facilities
▪ Island Power		▪ Water / Wastewater Treatment Plants

Optimal Design for Industrial Use

Preconfigured BESS units offer safe and reliable storage in six power nodes ranging from 211 to 2280 kWh.

- **Temperature range of -20 to 50 °C (-22 to 122 °F)**
- **Altitude capability: 2,000 m**

Refer to the BESS product brochure for full technical specifications.

01 **10-FOOT CONTAINER**
(211 to 422 kWh)

02 **20-FOOT HIGH CUBE CONTAINER**
(633, 1056, 1520 and 2280 kWh)

Battery Energy Storage Systems (BESS)

Power Onward™

Designed for Superior Performance and Safety

Lithium Ferrophosphate (LFP) Batteries

Cummins BESS solutions utilize state-of-the-art battery technology that enhances safety and provides the ideal chemistry for industrial applications.

- Higher cycle life
- Less prone to thermal runaway
- Prismatic cells
- 300 Ah capacity
- 0.5 C rating for charging / discharging
- Battery liquid-cooling technology

Liquid Cooling Thermal Management

A glycol-based thermal management system increases performance and maintains optimal battery temperatures more efficiently than air-cooled BESS units.

- Ensures uniform temperature distribution
- Extends battery life and reliability
- Permits high ambient operation up to 50 °C (122 °F)

Three Levels of Fire Safety

Informed customers are likely to be concerned about battery flammability. Cummins BESS units offer three levels of safety systems:

- **Level 1 —** Battery pack level immersion protection
- **Level 2 —** FK-5-1-12 fire extinguishing system
- **Level 3 —** Built-in water spray pipe

The cabinet also features real-time monitoring for heat, smoke, lithium-ion and combustible gases for additional safety.

A Resource for Energy Transition

BESS technology facilitates the integration of renewable energy sources by smoothing out power generation variabilities.

- Improves microgrid resilience and reliability
- Provides consistent power output
- True zero-emissions solution for managing renewables
- Reduces energy costs by enabling arbitrage and peak shaving

Why Cummins?

Many BESS solutions may seem identical and less expensive at first glance. Make sure your customers are aware of key factors that distinguish Cummins from the competition:

- True on-grid and off-grid solution — Cummins BESS technology is one of the few power systems on the market suitable for off-grid applications.
- Global distribution and service network — Customers can get domestic, Cummins-trained support and search for parts anywhere in the world.
- Plug-and-play integration — BESS technology is part of a fully integrated range of Cummins distributed energy resource (DER) products and services, pre-validated at the factory.
- Cummins reliability — With more than **100 years of power systems expertise**, our reputation for dependability is trusted worldwide.
- Power Integration Center (PIC) — Only Cummins enables customers to test and optimize BESS solutions before commissioning.