

# 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
<ul style="list-style-type: none"><li>▪ Remote communities</li><li>▪ Mining</li><li>▪ Oil and gas</li><li>▪ Remote industrial</li><li>▪ Island power</li></ul>	<ul style="list-style-type: none"><li>▪ Manufacturing / industrial sites</li><li>▪ EV charging infrastructure</li><li>▪ Commercial properties</li><li>▪ Universities / research institutes</li></ul>	<ul style="list-style-type: none"><li>▪ Data centers</li><li>▪ Healthcare facilities</li><li>▪ Commercial properties</li><li>▪ Public facilities</li><li>▪ Water / wastewater treatment plants</li></ul>

To learn more about Cummins BESS



## 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)

## 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.



## KEY CONTACTS

### Latin America

Marco Delgado - marco.delgado@cummins.com

### Southern Europe

Jose Melgarejo - jose.melgarejo@cummins.com

### Northern Europe

Nigel Chisman- nigel.chisman@cummins.com

### Middle East, India, Africa

Rajat Mathur - rajat.mathur@cummins.com

### Asia Pacific

Sherif Ibrahim - sherif.ibrahim@cummins.com