BE-LFP-25.6V200Ah 5.12KWH

Lithium Ion Battery

Low Voltage and High Voltage Range

Our advanced range of Low and High Voltage Lithium-Ion Battery Backup Solutions is specially engineered for demanding UPS and energy storage applications. High voltage designed for flexibility, they seamlessly support Two-Wire (Non-Center Tap) and Three-Wire (Center Tap) systems, ensuring reliable performance across diverse power setups.

At Bluamp Energy, we are dedicated to pioneering cutting-edge sustainable energy solutions that are both innovative and affordable. Our mission is to illuminate the world with green energy, ensuring a brighter and cleaner tomorrow for generations to come.
With a firm belief in the power of technology and sustainability, Bluamp Energy specializes in the manufacturing of high-performance Lithium-Ion batteries. Our expertise in this field enables us to deliver reliable, efficient, and durable energy storage solutions that cater to a wide range of applications, from uninterruptible power supplies (UPS) and material handling equipment (MHE) to electric vehicles and off-grid energy systems.

STATE-OF-THE-ART FACILITY
Our advanced manufacturing unit is the heart of our operations. Equipped with the latest technology and staffed by highly skilled professionals, our facility ensures that every product we deliver meets the highest standards of quality and efficiency. Our commitment to manufacturing excellence underpins our ability to innovate and lead in the green energy sector.

Facility Highlights:
- **Advanced Production Technology:** Leveraging the latest equipment for superior manufacturing.
- **Stringent Quality Control:** Ensuring every product meets rigorous standards.
- **Skilled Workforce:** Experienced professionals dedicated to excellence.
- **Environmentally Conscious Practices:** Minimizing our environmental impact through sustainable manufacturing processes.

What Sets Bluamp Energy's Lithium-Ion Battery Packs Apart

- **Premium Cell Selection:**
  We use only Grade A cells, handpicked for their superior consistency, capacity, and optimal charge-discharge performance. Every cell is chosen to ensure long-term reliability and efficiency.
- **Advanced Battery Management System (BMS):**
  Our intelligent BMS prioritizes both safety and performance. It actively monitors cell voltage, temperature, and overall battery health, while precisely calculating State of Charge (SOC) and other critical parameters.
- **Efficient Thermal Management (TMS):**
  Each module operates in an optimal thermal environment, supported by a thoughtfully engineered design. Where necessary, active fan cooling ensures consistent performance and extended battery life.
- **Smart Rack Design:**
  Our battery packs are built for seamless integration, following a modular form factor compatible with standard UPS rack formats, making installation and maintenance straightforward and efficient.

Lithium-Ion Battery Features

S No.	Features	Remarks
1.	Flexibility	Solutions are customised to match the exact requirement of the application & compatibility with the UPS systems .
2	Form Factor	Our solution ensures the smallest foot print built in customised racks.
3.	Float Service Life @25°C	10 - 12 years.
4.	No. Of Cycles	3000 cycles at 80% DOD (as per cell chemistry and Charge / Discharge Ratings).
5.	Rate Of Discharge	High Rate Discharge / Longer Back solutions.
6.	General Usage Temperature	25°C +/- 2 (recommended for Optimal performance).
7.	Usage	Float / Cyclic depends on Application requirement.
8.	Weight	Lighter as compared to other technologies.
9.	Warranty	3 or 5 years options based on application requirement.

BLUAMP ENERGY

Battery Pack Specifications

Parameters	Standard Value
Nominal Voltages	25.6 V
Typical Capacity (Capacity Can Be Vary By +/- 2%)	200Ah
Maximum Allowable Discharge Current	140A
Discharge Cut-Off Voltage	22.4V
Charge Voltage (Charge Mode: CC/CV, Use Special Lithium-Ion Battery Charger)	28.8V
Max Charge Current	60A
Cell Chemistry	LFP
Recommended Operating Temperature	+/- 25℃
Total Weight (+/- 2kg)	45KG Per System Approx
Size (WXDXH) (+/-2mm) (Can Be Tailor Made)	200mmX600mmX370mm
Temperature	• Working temperature: Charging Temperature 0~45℃ Discharging Temperature-20~60℃ • Storage Temperature: -10～50℃
Communication Interface	CAN/RS485
Protection Functions	• Over pack charge voltage protection • Under pack discharge voltage protection • Over current charge protection • Over & under temperature protection • Balance function • Over cell charge voltage protection • Over discharge current protection • Under cell voltage protection

Electrical Characteristics of the Battery Management System

Ambient Temperature: 25°C

Our advanced BMS plays a critical role in ensuring the health, safety, and performance of every battery pack:

- **Cell Voltage Monitoring:** Tracks the voltage of each individual cell, giving users a clear picture of battery health and overall system performance.
- **Current Measurement:** Accurately measures the current flowing through each pack, helping optimize power delivery for the specific needs of the system.
- **Temperature Monitoring:** Continuously checks the temperature of each cell to prevent overheating or thermal runaway, ensuring safe operation even in demanding conditions.
- **Capacity Indication:** Displays the battery's remaining capacity as a percentage, so users always know how much power is available.

Note: Specifications may vary depending on system design and specific application requirements.

BMS Specifications

Parameters	Specification	Remarks
Voltage	Charge Mode	CC/CV
	Single cell charge balance Voltage	Available
Current	Continuous charge current/ discharge	Available
Overcharge Voltage Protection	Overcharge protection voltage	Available
	Over charge release voltage	Available
Under Discharge Voltage Protection	Under discharge protection voltage	Available
	Under discharge release voltage	Available
Over Current Protection	Over charge current protection function	Available
	Over Discharge current protection function	Available
	Over discharge current release function	Cut off Loading, release automatically
Short Circuit Protection	Condition	External short circuit (need to connect earth tester)
	Release Condition	Cut off Loading, release automatically
Temperature	Over Charge/Discharge Temperature protection	Available
Heating Function	Available for Battery Warm	Work at set point

Certifications

CERTIFICATE

This is to certify that the Quality Management System of

BLUAMP ENERGY PRIVATE LIMITED

Plot No. 69, MIDC Industrial Area, Ambarnath West - Thane 421501 India

has been assessed and found to conform to the requirements of

ISO 9001:2015

This Certificate is valid for the following scope

Research, design, assembly, production, and testing of lithium-ion-based energy storage systems

Certificate No.	:AMER27329
Original Issue Date	:21/05/2025
Issue Date	:21/05/2025 R0
Surveillance /Expiry Date	:20/05/2026
Recertification Date	:20/05/2028

Director

AMERICO QUALITY STANDARDS REGISTECH PVT. LTD

ISO 9001

CERTIFICATE

This is to certify that the Environmental Management System of

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Plot No. 69, MIDC Industrial Area, Ambarnath West - Thane 421501 India

has been assessed and found to conform to the requirements of

ISO 14001:2015

This Certificate is valid for the following scope

Research, design, assembly, production, and testing of lithium-ion-based energy storage systems

Certificate No.	:AMER27330
Original Issue Date	:21/05/2025
Issue Date	:21/05/2025 R0
Surveillance /Expiry Date	:20/05/2026
Recertification Date	:20/05/2028

Director

AMERICO QUALITY STANDARDS REGISTECH PVT. LTD

ISO 14001

CERTIFICATE

This is to certify that the Occupational Health and Safety Management System of

BLUAMP ENERGY PRIVATE LIMITED

Plot No. 69, MIDC Industrial Area, Ambarnath West - Thane 421501 India

has been assessed and found to conform to the requirements of

ISO 45001:2018

This Certificate is valid for the following scope

Research, design, assembly, production, and testing of lithium-ion-based energy storage systems

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ISO 45001