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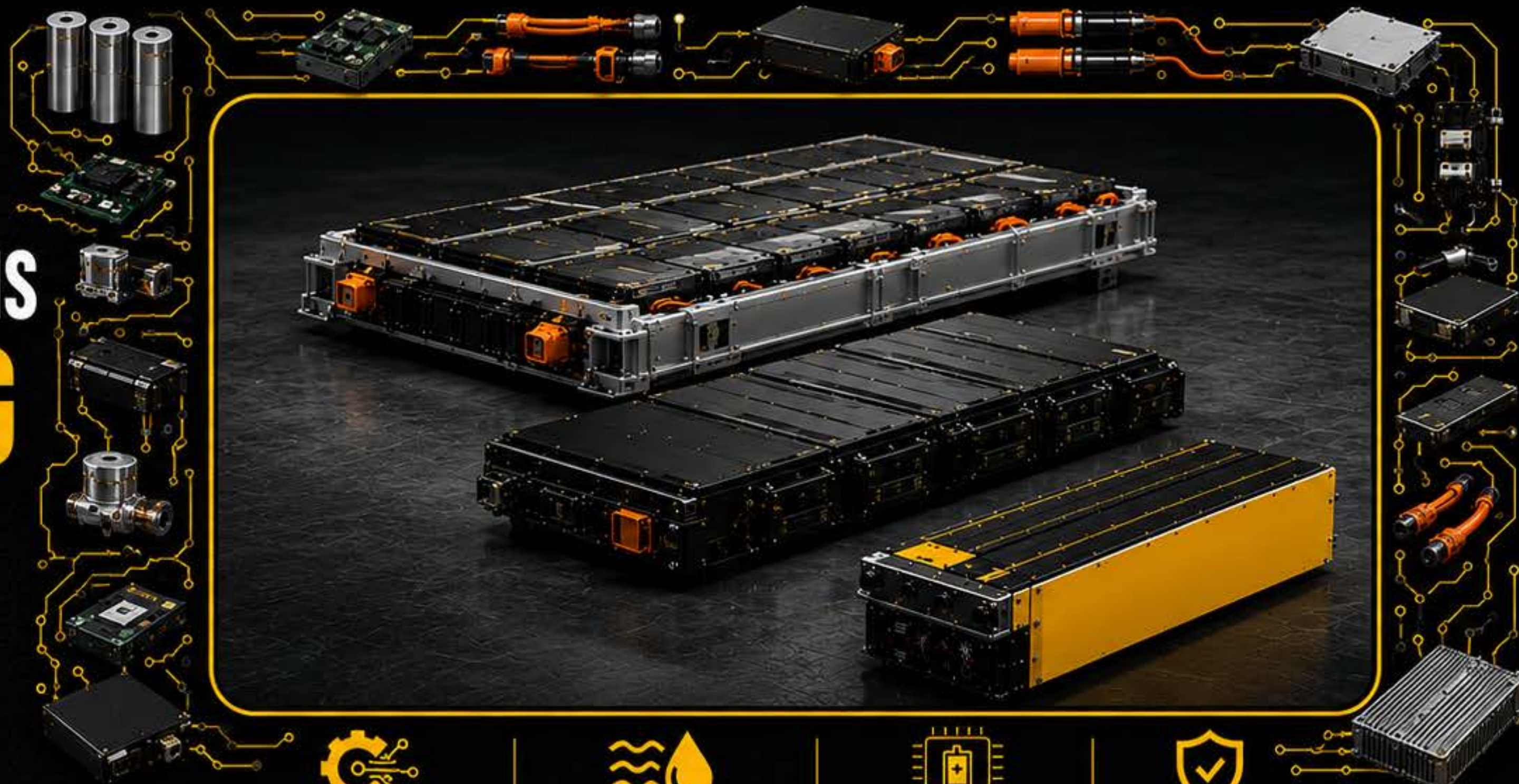
STRONG. SMART. CONNECTED.

CUSTOM BATTERY SYSTEMS 2026 CATALOG

for

ELECTRIC VEHICLES & MOBILE EQUIPMENT

POWER. • PERFORMANCE. • RELIABILITY.



ADVANCED
ENGINEERING



THERMAL
MANAGEMENT



BATTERY
INTELLIGENCE



RUGGED
RELIABILITY

50V

HIGH-POWER MODULE

50.4V | 1.7kWh
23.5kW Peak



325V 36kWh
BATTERY PACK

328.5V | 36.26kWh
72kW Peak



665V 99.8kWh
BATTERY PACK

665.6V | 99.8kWh
133kW Peak

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Download Catalog

HOW IS A BATTERY PACK MADE?

ENGINEERING. INTEGRATION. SAFETY.

A battery pack is far more than cells in a box.

It's an engineered system that delivers power, intelligence, thermal control, and safety—reliably and efficiently.

Built to perform.

Built to protect.

Built for what's next.

THE BATTERY PACK MANUFACTURING PROCESS

1 APPLICATION & POWER REQUIREMENTS



Determine voltage, energy, power, duty cycle, packaging space, environment, and charging requirements.

2 CELL SELECTION



Select cylindrical or prismatic chemistry according to power, energy, durability, and lifecycle targets.

3 CELL GROUPING & MODULE ASSEMBLY



Cells are arranged into electrically and mechanically controlled assemblies.

4 BUSBARS & ELECTRICAL CONNECTIONS



Cells/modules are electrically interconnected to achieve the required voltage and capacity.

5 BATTERY MANAGEMENT SYSTEM INTEGRATION



Sensors, monitoring electronics, communications, balancing, and protection logic are incorporated.

6 THERMAL MANAGEMENT INTEGRATION



Cooling channels, cold plates, coolant interfaces, and thermal monitoring are added where required.

7 HIGH-VOLTAGE & SAFETY SYSTEMS



Contactors, fuses, isolation monitoring, connectors, and safety systems are integrated.

8 MECHANICAL ENCLOSURE ASSEMBLY



Battery components are secured inside a rugged protective enclosure.

9 SOFTWARE CALIBRATION & COMMUNICATIONS



BMS controls and CAN or ISO-SPI communications are configured and validated.

10 TESTING & VALIDATION



Electrical, thermal, environmental, safety, and performance testing verify the completed system.



EVERY BATTERY PACK IS BUILT TO DELIVER MAXIMUM **PERFORMANCE** WITH UNCOMPROMISING **SAFETY** AND **RELIABILITY**.

KEY COMPONENTS



LITHIUM-ION CELLS



BATTERY MODULES



BATTERY MANAGEMENT SYSTEM



BUSBARS & HIGH-VOLTAGE CONNECTIONS



COOLING SYSTEM



SENSORS



SAFETY CONTACTORS / FUSES



STRUCTURAL ENCLOSURE

HOW DOES AN EV BATTERY PACK WORK?

STORE ENERGY. CONTROL POWER. MOVE THE MACHINE.

An EV battery pack is an engineered system that works as the heart of the machine. It stores energy, delivers power on demand, manages every cell, controls temperature, and recovers energy—safely and efficiently.

Intelligent power.
Every mile. Every mission.

EV DRIVE MODE – ENERGY FLOW



REGENERATIVE BRAKING ENERGY FLOW



During braking, the motor acts as a generator. Energy is converted back to DC power and stored in the battery pack, extending range and improving efficiency.

1 STORES ELECTRICAL ENERGY



Lithium-ion cells store energy for propulsion and auxiliary equipment.

2 SUPPLIES HIGH-VOLTAGE DC POWER



The battery pack delivers stable, high-voltage DC power to the inverter and other high-voltage systems.

3 MANAGES EVERY CELL



The BMS monitors voltage, temperature, current, state of charge, state of health, and system isolation—balancing cells and protecting the pack in real time.

4 CONTROLS TEMPERATURE



Liquid cooling maintains optimal temperatures during charging and discharge for performance, safety, and long life.

5 RECOVERS ENERGY



Regenerative braking returns energy from the motor back into the battery pack, improving range and efficiency.



SAFETY FIRST

Multi-layer protection, isolation monitoring, contactors, and fault detection keep the system and operator safe.



BUILT FOR PERFORMANCE

Delivers high power on demand with consistent performance in the most demanding conditions.



ENGINEERED RELIABILITY

Rugged mechanical design, validated components, and extensive testing ensure reliability you can depend on.

BUILT FOR MOBILE POWER



ELECTRIC TRUCKS



BUSES



CONSTRUCTION EQUIPMENT



MATERIAL-HANDLING EQUIPMENT



DEFENSE VEHICLES



MARINE APPLICATIONS



STATIONARY / MOBILE
POWER SYSTEMS

50V HIGH-POWER MODULE

COMPACT POWER. FLEXIBLE ARCHITECTURE.

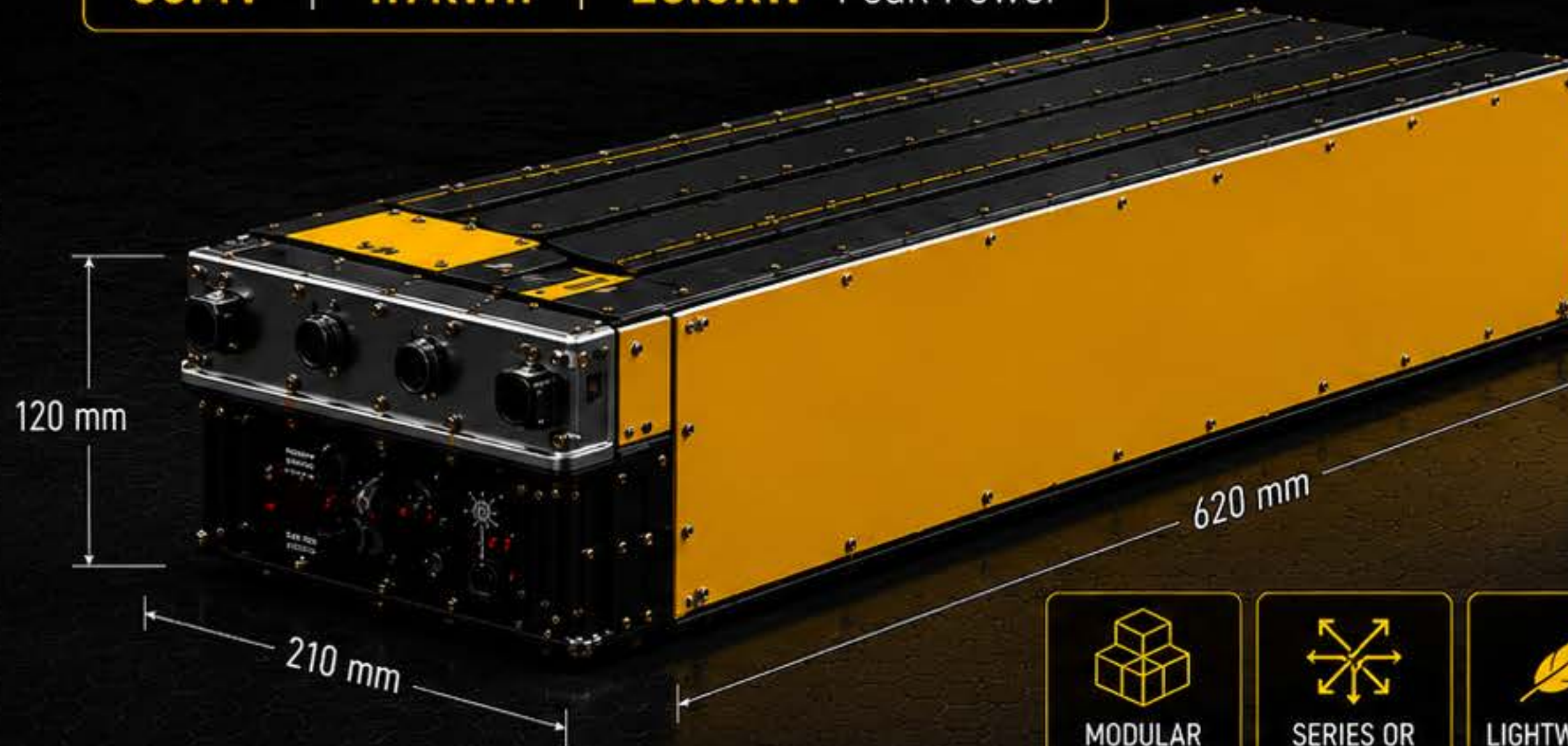
50.4V | **1.7kWh** | **23.5kW** Peak Power

The 50V High-Power Module is a compact, liquid-cooled battery module engineered for high-power electric applications. Built with 21700 NCA cells and an integrated BMS slave board, it delivers exceptional power density, reliability, and modularity.

Small in size.

Big on performance.

Built for what's next.



MODULAR
BY DESIGN



SERIES OR
PARALLEL



LIGHTWEIGHT
& POWERFUL

KEY FEATURES



21700 cylindrical NCA cells



High power density



Integrated BMS slave board



ISO-SPI communication



Liquid cooling



Series or parallel configuration



UN38.3 certified



Approx. 10 kg



170 Wh/kg



Up to 600A peak discharge

COMMON USES



AUTOMOTIVE



MOBILE EQUIPMENT



DEFENSE



MARINE



STATIONARY POWER



SPECIALIZED HIGH-POWER
ARCHITECTURES

325V 36kWh BATTERY PACK

HIGH-VOLTAGE POWER. BUILT FOR MOBILE EQUIPMENT.

⚡ 328.5V | 📦 36.26kWh | ⚡ 72kW Peak Power

The 325V 36kWh Battery Pack delivers power, range, and durability for medium and heavy-duty electric vehicles and equipment. Engineered with 21700 NMC cells, liquid cooling, and a distributed BMS architecture, it's built to perform in the most demanding environments.

Engineered for performance.

Built for reliability.

Ready for what's next.



KEY FEATURES

- 🔋 21700 cylindrical NMC cell technology
- ⚡ 110.4Ah / 36.26kWh
- 💧 Liquid-cooled
- 🧠 Distributed BMS
- 📡 CAN communications
- 🔗 Series/parallel configuration
- ⚡ 330V or 650V architecture capability
- 🛡️ IP67 enclosure
- 📦 Optional high-voltage junction box
- 🔄 ≥3,000 expected cycles under the stated test conditions



HIGH ENERGY DENSITY
36kWh of energy in a compact, robust design.



RUGGED & RELIABLE
IP67 automotive-grade enclosure for harsh operating conditions.



LIQUID-COOLED
Advanced thermal management for consistent performance and longevity.



INTELLIGENT CONTROL
Distributed BMS for precise monitoring, protection, and balancing.



FLEXIBLE ARCHITECTURE
Series/parallel configuration enables 330V or 650V system designs.



SAFETY FIRST
Multiple layers of electrical protection and thermal safeguards.

COMMON USES



MEDIUM-DUTY EVs



HEAVY-DUTY VEHICLES



COMMERCIAL TRUCKS



BUSES



MOBILE INDUSTRIAL EQUIPMENT



DEFENSE PLATFORMS



MARINE EQUIPMENT



OSANTS®

STRONG. SMART. CONNECTED.

The 665V 99.8kWh Battery Pack is our flagship energy system for medium and heavy-duty electric vehicles and equipment. Built with long-life LFP prismatic cells, liquid cooling, and a distributed BMS architecture, it delivers industrial-scale power, durability, and the cycle life you can count on.

BUILT FOR THE TOUGHEST JOBS.

Rugged performance in the most demanding environments.

ENGINEERED FOR THE LONG HAUL.

Exceptional cycle life and efficiency you can rely on.

POWER THAT KEEPS YOU MOVING.

Consistent, high-output energy for heavy-duty applications.

665V 99.8kWh BATTERY PACK

HEAVY-DUTY ENERGY. INDUSTRIAL-SCALE PERFORMANCE.

 665.6V |  99.8kWh |  133kW Peak Power



KEY FEATURES

-  LFP prismatic cell technology
-  150Ah / 99.8kWh
-  99.8kW continuous output
-  133kW peak output
-  Liquid cooling
-  Distributed BMS
-  CAN communication
-  IP67 rugged enclosure
-  90% recommended depth of discharge
-  ≥3,000 expected cycles under the stated conditions
-  2000-cycle / 3-year warranty, with optional extended warranty



INDUSTRIAL-SCALE ENERGY

99.8kWh of high-capacity energy for maximum range and productivity.



LONG-LIFE LFP CHEMISTRY

LFP technology delivers exceptional safety, stability, and long cycle life.



LIQUID-COOLED PERFORMANCE

Advanced liquid cooling maintains optimal temperatures for consistent high performance.



INTELLIGENT MONITORING

Distributed BMS monitors every module for cell balancing, protection, and system reliability.



RUGGED & RELIABLE

IP67 automotive-grade steel enclosure built to withstand extreme environments.



BUILT TO LAST

≥3,000 cycles and 3-year warranty standard for confident ownership.

ENGINEERED FOR POWER. BUILT FOR THE REAL WORLD.

Advanced battery systems designed for performance, durability, safety, and dependable operation across demanding electric-vehicle and mobile-equipment applications.



HIGH PERFORMANCE

Purpose-built voltage, energy, and power architectures.



INTELLIGENT BATTERY MANAGEMENT

Advanced monitoring, protection, and communications.



THERMAL CONTROL

Liquid-cooled systems designed for demanding duty cycles.



RUGGED & VALIDATED

Automotive-grade construction and applicable safety certification.



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We engineer advanced battery systems that deliver the power, reliability, and safety you need—mission after mission, mile after mile, job after job.

BUILT FOR WHAT'S NEXT.



UN38.3
CERTIFIED



IP67
RATED



CAN
COMMUNICATION



AUTOMOTIVE
GRADE



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