

ESSENTIAL SERIES | 24V PLATFORM | HEATED

24V 230Ah LiFePO4 Battery

High-capacity heated Bluetooth LiFePO4 power for 24V marine, RV, solar, off-grid, backup, and mobile energy systems.



MASTER RATINGS TABLE

Single source for nominal voltage, capacity, stored energy, and current ratings.

25.6V

NOMINAL VOLTAGE

230Ah

NOMINAL CAPACITY

5.89kWh

STORED ENERGY

200A

CONT. DISCHARGE

200A

MAX CHARGE RATING

100A

RECOMMENDED CHARGE

300A @ 10s

PEAK DISCHARGE

IP54

WEATHER RESISTANT

DEEP-CYCLE LOAD WARNING

The 300A rating is a short-duration 10-second peak only. Do not design continuous loads above the 200A per-battery continuous limit. This model is designed for deep-cycle service; for engine starting or cranking, use a cranking-rated battery or confirm compatibility with Epoch before installation.

BLUETOOTH MONITORING

INTERNAL HEATING

IP54 RATED

11 YEAR WARRANTY

BANK CONFIG PER MANUAL

Heated Bluetooth 24V LiFePO4 Power

The Epoch 24V 230Ah Essential Series LiFePO4 Battery is engineered for reliable 24V deep-cycle power in marine, RV, solar, off-grid, backup, and mobile energy systems. It combines 5.89kWh of stored energy, internal low-temperature charging support, Bluetooth monitoring, IP54 weather-resistant construction, and an advanced BMS in a Group 8D footprint.

Primary use

Deep-cycle 24V house power and auxiliary energy storage. Not for cranking unless Epoch confirms compatibility.



Internal heating

Built-in heating helps support charging in cold conditions within the specified operating range.



Bluetooth monitoring

Compatible with Epoch Li-Ion iOS and Android apps for battery status monitoring.



Advanced BMS

Protection against overcharge, over-discharge, over-current, short circuit, and temperature extremes.



4,000+ cycles

Long-cycle LiFePO4 design for maintenance-free energy storage compared with lead-acid batteries.



IP54 enclosure

Dust-protected and splash-resistant for everyday RV, marine, mobile, and outdoor use.



Bank planning

Configure multi-battery banks only according to the latest Epoch manual and support guidance.

COMPATIBLE APPLICATIONS

- 24V trolling motor systems where current requirements match the motor specifications
- Marine house-power systems for electronics, lighting, pumps, and onboard accessories
- RV, camper, trailer, van, overland, and mobile 24V auxiliary power systems
- Solar, off-grid, backup, and small energy-storage systems with compatible equipment

Category	Rating / Detail
Series	Essential Series
Battery type	Heated Bluetooth deep-cycle LiFePO4
System voltage	24V nominal / 25.6V battery
Cell configuration	8S1P prismatic LiFePO4
Warranty	11-year manufacturer warranty

Deep-cycle battery notice

Use lithium-compatible charging equipment. Do not mix batteries of different model, age, capacity, or state of charge in series/parallel banks.

Master Specification Tables

Ratings at 25 deg C unless otherwise noted. Verify charger programming, cable ampacity, fuse ratings, battery tray clearance, and environmental limits before final installation.

Electrical	Rating
Nominal voltage	25.6V
Nominal capacity	230Ah @ 0.2C
Nominal energy	5.89kWh
Operating range	20.0V - 29.2V
Max charge voltage	29.2V
Max continuous discharge	200A
Max charge current rating	200A
Recommended max charge	100A
Peak discharge	300A @ 10 seconds
Cell configuration	8S1P prismatic LiFePO4
Bluetooth / heating	Yes / Yes

Mechanical / Environmental	Rating
Dimensions	20.55 in L x 9.45 in W x 8.60 in H
Weight	84 lb / 38.10 kg
Group size	Group 8D footprint
Terminal	M8 female / verify supplied torque
Case material	Battery-grade ABS/PC housing
IP rating	IP54
Charge temp	-20C to 55C with self-heating
Discharge temp	-20C to 60C
Storage temp	0C to 35C recommended
Series / parallel	Per Epoch manual / support guidance
Cycle life	4,000+ cycles

DIMENSIONAL REFERENCE



Overall: 20.55 in L x 9.45 in W x 8.60 in H

Group 8D footprint

Plan tray clearance, terminal hardware, handles, cable bend radius, ventilation, and service access.



TOP VIEW

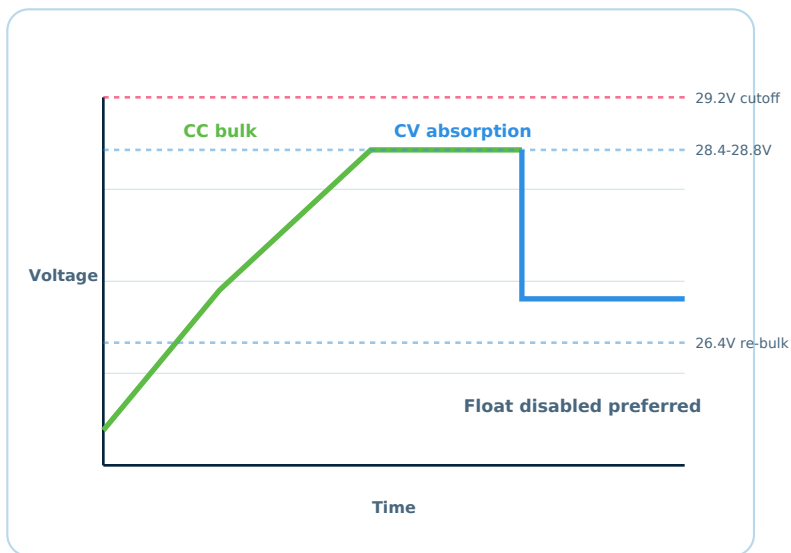
20.55 in

9.45 in

Metric approx.: 52.20 cm L x 24.00 cm W x 21.84 cm H

Recommended 24V Charging Settings

Program chargers, inverter/chargers, converters, solar controllers, and DC-to-DC chargers for LiFePO4 operation. Disable equalization and temperature compensation.



Setting	Recommended value
Max continuous charge	100A recommended / 200A rating
Bulk / absorption	28.4V - 28.8V
Absorption end	Current $\leq$ C/20 or 15 min max
Float	Disabled preferred, or 26.6V - 27.2V
Re-bulk	26.4V
Equalization	Disabled
Temperature compensation	0mV/deg C / none
BMS high-voltage cutoff	29.2V
SOC recalibration	29.2V

INTERNAL HEATING WORKFLOW

1. Charger connected

Apply Epoch 24V LiFePO4 charge settings within voltage/current limits.

2. BMS checks temp

BMS monitors cell temperature and blocks charging outside limits.

3. Heating enabled

Internal heater warms cells before charging resumes.

4. Charge proceeds

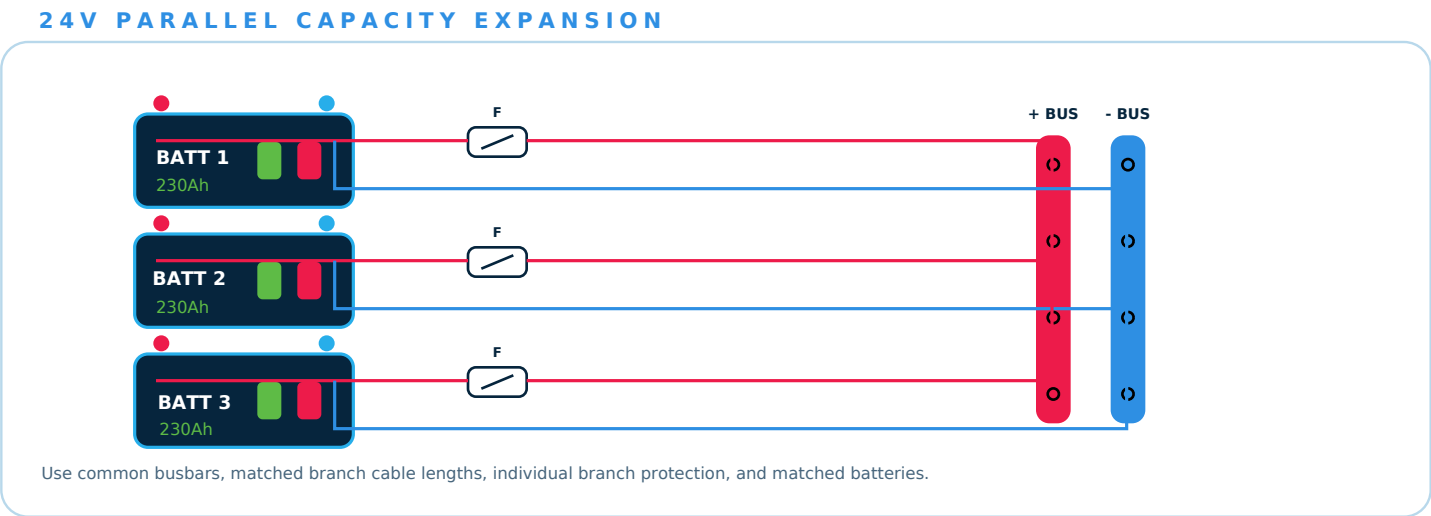
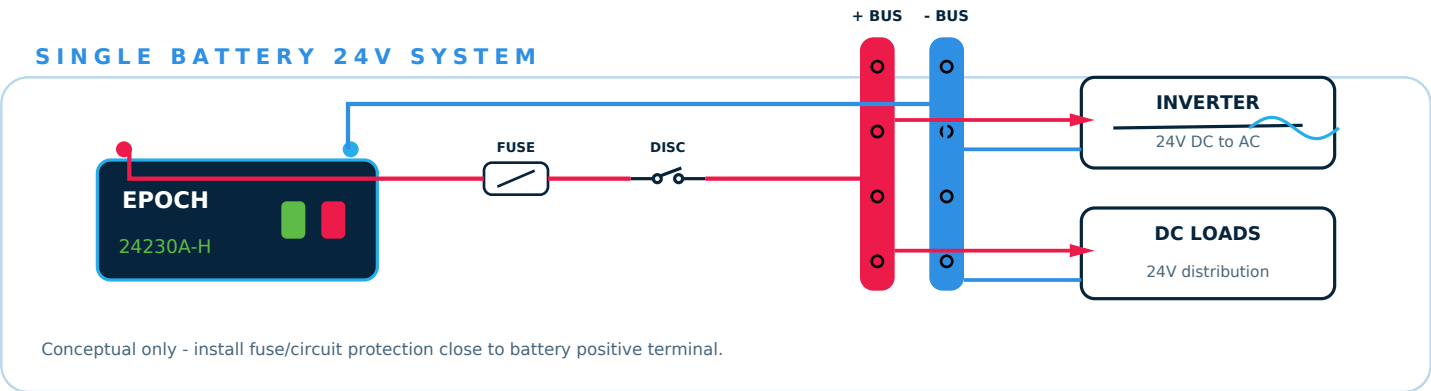
Charging resumes when cells are within temperature and BMS limits.

Charge only with compatible LiFePO4 equipment. Do not use lead-acid equalization modes. Stop operation if abnormal heat, odor, swelling, damage, or repeated BMS disconnects occur.

BMS protection	Function
Overcharge / over-discharge	Disconnects or limits operation to protect cells
Over-current	Protects against sustained loads above ratings
Short circuit	Rapid BMS cutoff / protected
High / low temperature	Disconnects when outside operation range
Operating voltage range	20.0V - 29.2V

24V Wiring Configurations

Diagrams are vector planning references. Final installations must use appropriately rated conductors, fuses, breakers, disconnects, bus bars, terminals, torque, strain relief, and lithium-compatible charging equipment.



Bank	Nominal V	Capacity	Energy	Planning notes
1 battery	25.6V	230Ah	5.89kWh	Single 24V Group 8D battery
2P parallel	25.6V	460Ah	11.78kWh	Use common busbars
3P parallel	25.6V	690Ah	17.66kWh	Balance branch lengths
Additional parallel	25.6V	Per count	Per count	Confirm maximum per current Epoch guidance

Parallel bank notice

Use identical model, age, SOC, cable length, and branch protection. Verify current Epoch guidance before finalizing bank count.

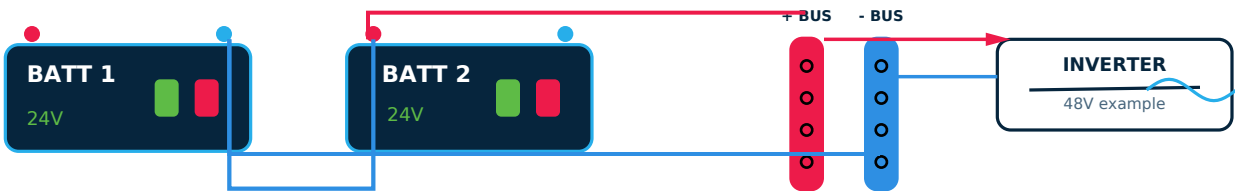
Series / Series-Parallel Planning

The product page directs multi-battery banks to the current Epoch manual and support guidance. The diagrams below are conceptual only and should not be treated as approval for a specific series or series-parallel limit.

Approval required

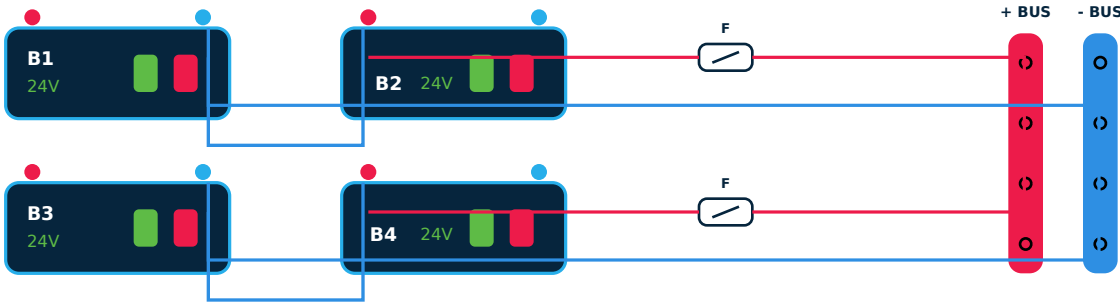
Confirm model-specific bank limits before series wiring.

SERIES EXAMPLE - VERIFY MODEL SUPPORT



Series wiring increases voltage while capacity remains 230Ah. Use only if allowed by current Epoch documentation.

SERIES-PARALLEL EXAMPLE - ENGINEERING REVIEW REQUIRED



Use identical strings, string fusing, equal cable lengths, and approved system voltage settings.

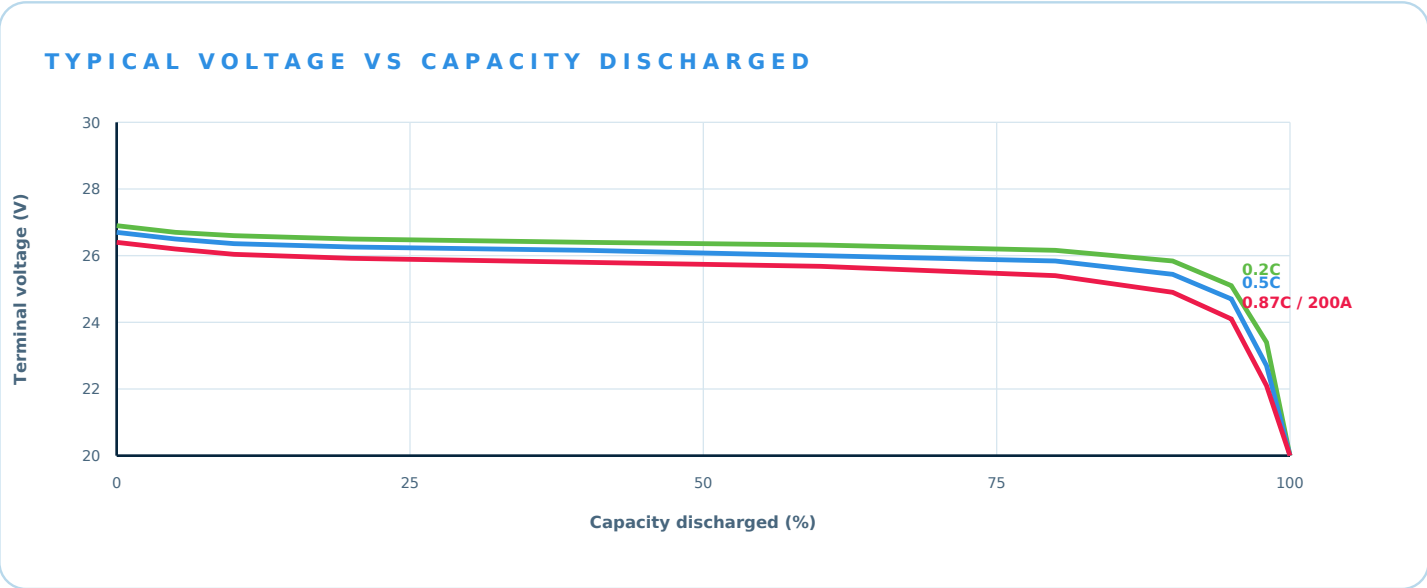
Example	Nominal V	Capacity	Energy	Use case / note
2P	25.6V	460Ah	11.78kWh	Parallel 24V expansion
2S	51.2V	230Ah	11.78kWh	Verify series support first
2S2P	51.2V	460Ah	23.55kWh	Engineering review required
Higher expansion	Per design	Per design	Per design	Use latest Epoch manual/support guidance

Series wiring notice

Do not hot-connect batteries. Confirm full-bank charger voltage, inverter low-voltage settings, conductor insulation rating, enclosure clearance, and overcurrent protection before energizing.

Performance Planning Curves

Curves below are planning visuals for LiFePO4 behavior and current-limit communication. Actual voltage, runtime, and available capacity vary with temperature, battery age, cable voltage drop, load profile, BMS limits, and test method.



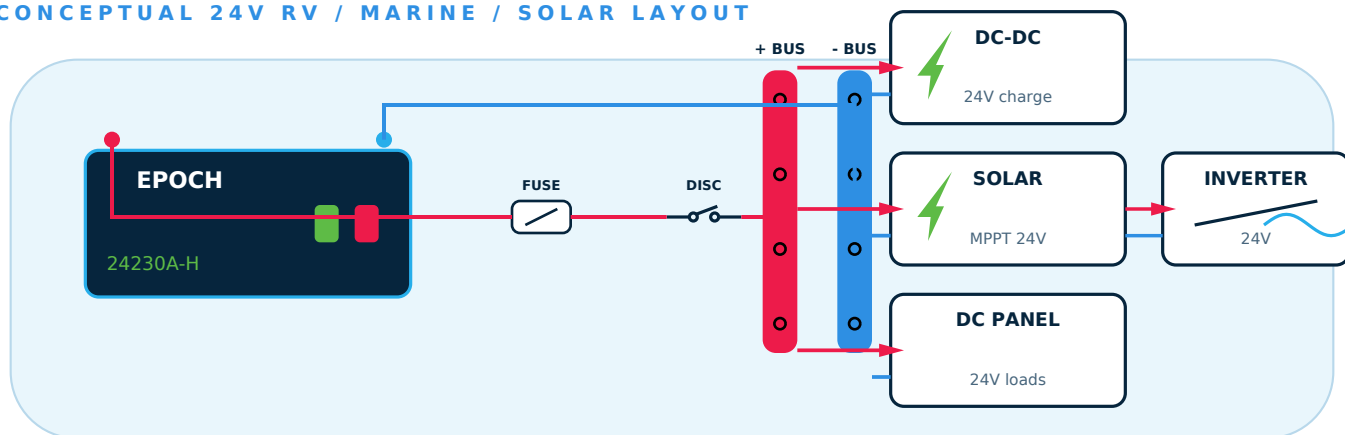
Application Layouts & Planning

Designed for 24V energy systems that need high-capacity LiFePO4 storage with Bluetooth monitoring and cold-weather charging support. Use the diagram as a conceptual planning reference, not as installation instructions.

Compatibility target

Confirm charger, inverter, alternator, and load requirements.

CONCEPTUAL 24V RV / MARINE / SOLAR LAYOUT



Conceptual layout only. Verify charger settings, cable size, fuse ratings, and system voltage before installation.

TYPICAL LOADS

Electronics

Navigation, radios, pumps, lighting, instruments

24V power

24V panels, trolling motors, inverters, RV, marine, solar

RUNTIME ESTIMATE

Nominal energy

5.89kWh per battery

80% planning energy

Approx. 4.71kWh per battery

Formula

Runtime hr = usable Wh / load W

EXAMPLES

250W DC load

Approx. 18.8 hr at 80% planning energy

1,000W load

Approx. 4.7 hr at 80% planning energy

Parallel bank

Multiply usable energy by number of batteries

Planning note

Runtime examples are simplified estimates. Inverters, converters, cabling, temperature, age, BMS limits, duty cycle, and real load behavior will change real-world results.

Safety, Storage & Commissioning

This page summarizes planning practices for safe handling and system readiness. Refer to the latest Epoch user manual and local codes for complete instructions before installation, operation, transport, or service.

INSTALLATION CHECKLIST

- ✓ Use only LiFePO₄-compatible chargers and disable equalization modes.
- ✓ Route cables away from sharp edges, hot surfaces, abrasion points, and moving parts.
- ✓ Install appropriate fuses or circuit breakers and verify voltage ratings.
- ✓ Secure the battery upright in a dry, ventilated, accessible location.

STORAGE & HANDLING

- ✓ Store in a cool, dry location and protect from direct sunlight, rain, and impact.
- ✓ For long-term storage, maintain approximately 50% SOC and periodically recharge.
- ✓ Do not submerge, pressure wash, short-circuit, disassemble, crush, or incinerate.
- ✓ Keep away from children, pets, conductive tools, flames, and incompatible batteries.

Compliance / Listings	Detail
Chemistry	LiFePO ₄ / lithium iron phosphate
Product markings	CE, RoHS, UN 38.3 shown on product artwork
Transport	Lithium battery shipping requirements apply
Warranty	11-year manufacturer warranty
Protection	Advanced BMS with overcharge, over-discharge, over-current, short-circuit, and temperature disconnects

Critical warnings

- Never reverse polarity or connect positive and negative terminals directly with a conductor.
- Stop use and disconnect if the battery emits odor, becomes abnormally hot, is damaged, deformed, submerged, or shows abnormal behavior.
- For emergency response, use appropriate lithium battery fire response procedures and contact qualified personnel.

Revision	Date	Description
V01	2026-06-20	Expanded visual data sheet for 24230A-H using current product-page data and established Epoch data-sheet template.

Epoch Batteries

1-888-501-1846 | support@epochbatteries.com

3075 Chastain Meadows Pkwy, Marietta, GA 30066, USA | 954 Ponce de Leon Ave, Suite 401, San Juan, PR 00907, USA