EPOCH BATTERIES

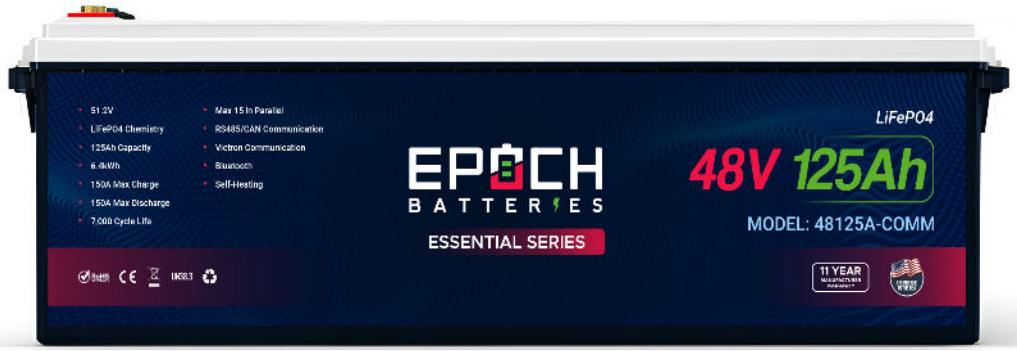
USER MANUAL

REVISION V01 · OCTOBER 2026

ESSENTIAL SERIES · 48V · HEATED · VICTRON CAN

48V 125Ah LiFePO4 BATTERY

HEATED 48V LITHIUM POWER WITH VICTRON COMMUNICATION



51.2 V	125 Ah	6.40 kWh	150 A	300 A
NOMINAL	CAPACITY	STORED ENERGY	CONTINUOUS	PEAK · 10 S

MODEL / SKU **48125A-COMM**

Read this manual completely before installing, charging, operating, storing or servicing the battery. Series connections are not approved for this model. Keep it with the battery for future reference.

IMPORTANT NOTICE LEGAL PROVISIONS

Purpose of this manual

This manual explains safe handling, installation, charging, operation, storage, maintenance, troubleshooting and warranty support for the Epoch 48125A-COMM Bluetooth LiFePO4 battery. It is written to help users and installers reduce risk, protect connected equipment and get reliable performance.

Qualified installation

Battery systems can deliver high current. Installation and service should be performed by people who understand DC electrical systems, lithium battery charging, overcurrent protection, conductor sizing, terminal hardware and safe work practices. When the battery is part of a boat, RV, vehicle, trailer, cabin or building system, follow all applicable codes and equipment manufacturer requirements.

Product changes

Specifications, accessories, firmware, labels and documentation may change without notice. Use the latest Epoch Batteries documentation and product labeling for installation, operation and service.

Warranty and compliance

Failure to follow this manual, using incompatible chargers or accessories, modifying the battery, improper installation, abuse, water intrusion beyond the product rating, incorrect polarity, overcurrent events, or operation outside the specified limits may void warranty coverage and may create safety hazards.

⚠ WARNING

Incorrect installation or use can cause fire, electric shock, severe injury, death, or damage to the battery and connected equipment. Stop and contact Epoch Batteries support if any instruction is unclear.

SAFETY SIGNAL WORDS ANSI Z535 STYLE

Safety messages in this manual use these signal words to show the severity of a hazard:

⚠ DANGER	A hazardous situation that, if not avoided, **will** result in death or serious injury.
⚠ WARNING	A hazardous situation that, if not avoided, **could** result in death or serious injury.
⚠ CAUTION	A hazardous situation that, if not avoided, could result in minor or moderate injury.
NOTICE	Practices that can damage the battery, connected equipment or property. No personal-injury hazard.

CONTENTS

01	Introduction	4
02	Safety	5
03	Product overview	7
04	Specifications	10
05	Planning your system	12
06	Installation	14
07	Electrical connections	16
08	Parallel battery banks	18
09	Victron integration and applications	20
10	Charging	23
11	Bluetooth monitoring	25
12	Operation and storage	27
13	Maintenance	28
14	Troubleshooting	29
15	Warranty and support	31
A	Glossary	33
B	Commissioning record	36
C	Maintenance log	37

QUICK REFERENCE · 48125A-COMM

Nominal voltage / capacity / energy	**51.2 V · 125 Ah · 6.40 kWh**
Continuous discharge / peak	**150 A · 300 A for 10 s**
Recommended / maximum charge current	**Up to 62.5 A · 150 A**
Bulk / absorption · float	**56.8–57.6 V · 54.0–55.2 V**
Equalization · temperature compensation	**Disabled · disabled**
Charge temperature	**–30 to 55 °C / –22 to 131 °F**
Series / parallel	**Parallel only · max. 15P**
Support	**1-888-501-1846 · support@epochbatteries.com**

CONVENTIONS HOW TO READ THIS MANUAL

- Model-specific data figures plot this battery's published ratings.
- Conceptual diagram figures explain principles. They are not wiring instructions for a specific installation; final designs must follow applicable codes.
- Notes in the right margin give **definitions** of technical terms and practical **tips**. A full glossary is in Appendix A.
- Ratings are at 25 °C (77 °F) unless stated otherwise. Temperatures are given in °C and °F; dimensions in inches and millimeters.

01 INTRODUCTION

Thank you for choosing Epoch Batteries. The 48125A-COMM is a 51.2 V, 125 Ah, 6.40 kWh Essential Series LiFePO4 battery designed for 48V energy storage in off-grid and solar systems, RV, van and boat house power, golf carts and backup power.

This manual explains how to use the battery safely in off-grid and solar energy storage, RV, van and boat house-power systems, golf carts and utility vehicles, and backup power where the system requirements match the battery specifications.

DEFINITION

Deep-cycle battery

A battery built to deliver steady current over long periods and be discharged deeply and recharged many times. A cranking (starting) battery is built for very high current for a few seconds to start an engine.

WHO SHOULD USE THIS MANUAL

- **End users** who need basic safety, charging, Bluetooth and storage guidance.
- **Installers** who need model-specific electrical limits, terminal information and battery bank considerations.
- **Dealers, support teams and service technicians** who need a consistent troubleshooting and warranty reference.

IMPORTANT COMPATIBILITY NOTE

The 48125A-COMM is a lithium battery and is not a drop-in replacement for every lead-acid installation. Before installation, verify tray fit, terminal clearance, cable size, overcurrent protection, charger profile, charging-source compatibility and load requirements.

DEFINITION

LiFePO4

Lithium iron phosphate, a lithium-ion chemistry known for thermal stability and long cycle life. Each LiFePO4 cell has a nominal voltage of 3.2 V; 16 in series give 51.2 V.

NOTICE

This model is a heated 48V deep-cycle LiFePO4 battery with Bluetooth, RS485 battery linking and Victron CAN communication. It is **not** a cranking battery. Series connections are not approved; expand capacity with up to 15 batteries in parallel.

BEFORE YOU BEGIN

1. Read Section 2 (Safety) and keep this manual with the battery.
2. Register the battery within 90 days of purchase for full warranty coverage (Section 15).
3. Complete the pre-installation checklist in Section 5 before connecting any cable.
4. Record the installation in the commissioning record in Appendix B.

02 SAFETY

Safe use depends on correct equipment, proper wiring, clean connections, compatible chargers, secure terminal hardware, and operation within the temperature and current limits.

GENERAL SAFETY RULES

- Read all instructions before use. Keep the battery away from children and pets.
- Do not open, drill, crush, puncture, drop, burn or modify the battery.
- Do not short the terminals or let tools, jewelry or conductive objects bridge them.
- Use insulated tools and appropriate personal protective equipment, such as safety glasses.
- Confirm polarity before connecting chargers, loads, DC-to-DC chargers, solar controllers, inverters or parallel wiring.
- Stop using the battery immediately if it becomes unusually hot, emits odor, smokes, leaks, swells, makes unusual sounds or is physically damaged.
- At 51.2 V nominal (58.0 V when charging), the battery can cause a shock in wet conditions and can deliver very high fault current.
- Use only chargers, inverters and loads rated for a 48V LiFePO4 system; never connect the battery to 12V or 24V equipment.

⚠ DANGER

Do not connect the positive and negative terminals together. A short circuit can release extremely high current and may cause arcing, burns, fire or equipment damage.

DO NOT

- Connect this model in series unless Epoch provides written model-specific approval.
- Mix this battery with lead-acid batteries in the same bank, or mix different models, capacities, ages or chemistries in a parallel bank.
- Connect to a charger, alternator system, converter, inverter charger, solar controller or DC-to-DC charger that cannot be configured for LiFePO4.
- Use lead-acid equalization, desulfation or repair modes.
- Exceed 150 A continuous charge current, 150 A continuous discharge current, or 300 A peak current for longer than 10 seconds.
- Charge the battery outside its charge temperature range of −30 to 55 °C / −22 to 131 °F (with internal heating).
- Install without properly sized DC overcurrent protection.
- Submerge, pressure wash, or expose the battery to standing water.
- Continue use after a severe impact, fire event, water intrusion or visible case damage.

TIP

Keep the terminal covers on until the moment each terminal is wired, and refit them as soon as the connection is complete.

EMERGENCY CONDITIONS

If the battery smokes, becomes unusually hot, emits odor, leaks, swells or behaves abnormally, stop use immediately. If it is safe to do so, disconnect chargers and loads. Move people away from the battery and contact emergency services when fire, smoke,

chemical exposure or injury is possible. Follow the product safety data sheet (SDS) and emergency responder instructions.

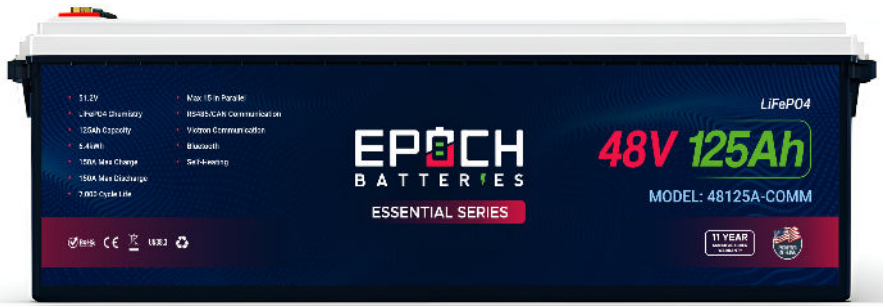
> ⚠ **WARNING**
>
> Do not use water directly on a damaged or burning lithium battery unless directed by emergency responders. Use an appropriate extinguisher and follow local emergency procedures. Never open the battery case: internal cells and BMS components are not user-serviceable.

TRANSPORT

The battery is tested to UN 38.3 for lithium battery transport. Protect the terminals from short circuit during transport, secure the battery against movement, and follow the hazardous-materials rules that apply to the shipping method. Ship a battery to Epoch only when instructed (Section 15).

03 PRODUCT OVERVIEW

The Epoch 48V 125Ah Essential Series stores 6.40 kWh in one 51.2 V battery. It delivers and accepts up to 150 A continuously, supplies 300 A for up to 10 seconds for start-up surges, heats itself for charging in freezing weather, balances its 16 cells with a 2 A active balancer, and reports to the Epoch Li-Ion app over Bluetooth and to Victron GX devices over CAN. Up to 15 batteries can be connected in parallel.



Product render shown for identification. Labels and accessories may vary by production revision.

KEY FEATURES

125 Ah / 6.40 kWh
48V deep-cycle energy in one battery.

150 A continuous
Charge and discharge; 300 A peak for up to 10 s.

Self-heating
Internal heater warms the cells for charging below freezing.

Victron CAN comms
Reports to Cerbo GX and Ekrano GX systems with DVCC.

Battery linking
RS485-IN and RS485-OUT ports link the batteries in a bank.

Bluetooth monitoring
Epoch Li-Ion app for iOS and Android.

2 A active balancing
Keeps the 16 cells matched without user intervention.

Parallel expansion
Up to 15 batteries in parallel. No series.

11-year warranty
Manufacturer warranty; register within 90 days of purchase.

CONTROLS AND INDICATORS



Top panel: negative (–) and positive (+) terminals, RS485-IN, RS485-OUT and CAN ports, and the POWER button (product render).

ITEM	FUNCTION
POWER button	Switches the battery's discharge output off or on. While the button has discharge switched off, the app cannot switch it back on and the terminal voltage drops to a level most equipment cannot use; low-power devices such as LED lights may still run.
RS485-IN	Battery-link input: receives data from the previous battery in a linked bank.
RS485-OUT	Battery-link output: sends data to the next battery in a linked bank.
CAN	Connects the battery to a Victron GX device (Section 9).
Port caps	Keep the caps fitted on unused data ports to keep out dust and water.
Terminals	Positive (red, +) and negative (black, –) threaded terminals on the top panel.
End handles	For lifting and carrying; the battery weighs about 110 lb / 50 kg.

PRIMARY USES

- Off-grid cabins, homes and solar energy storage with 48V inverter chargers and MPPT solar charge controllers.
- RV, van and boat house power built around a 48V inverter charger, installed in a dry, protected location.
- Victron systems with a Cerbo GX or Ekrano GX, using CAN communication and DVCC.
- Golf carts and utility vehicles whose motor controller stays within 150 A continuous, with acceleration and hill-climbing peaks of no more than 300 A for up to 10 seconds.
- Backup power, and larger banks of up to 15 batteries in parallel.

IN THE BOX

- One Epoch 48V 125Ah Essential Series battery, model 48125A-COMM.
- One CAN communication cable for connection to a Victron GX device.

DEFINITION

BMS

Battery management system: electronics inside the battery that monitor cell voltage, current and temperature, and disconnect the battery to protect the cells when a limit is exceeded.

DEFINITION

IP54

An IEC 60529 enclosure rating: dust-protected (5) and protected against splashing water from any direction (4). Not waterproof.

IDENTIFYING YOUR BATTERY

The model number (48125A-COMM) is printed on the battery label. Record the model and serial number in the commissioning record (Appendix B); you will need them for registration, support and warranty claims.

NOTICE

This model has internal heating. When the cells reach 0 °C / 32 °F, the BMS stops charging and uses the incoming charge current to power the internal heater. Charging resumes automatically when the cells reach 5 °C / 41 °F. The heater runs only while a charger is connected and supplying at least 0.5 A; it does not use the battery's stored energy. IP54 is not submersible: do not submerge, pressure wash, or install the battery where standing water can collect around the case or terminals.

04 SPECIFICATIONS

Ratings at 25 °C unless otherwise noted. This section is the reference for every limit used elsewhere in the manual.

GENERAL	
Brand	Epoch Batteries
Model / SKU	48125A-COMM
Series	Essential Series
Battery type	Heated 48V deep-cycle LiFePO4 battery with Bluetooth, RS485 / CAN and Victron communication
Chemistry	LiFePO4 (lithium iron phosphate)
Cell type	Grade-A prismatic LiFePO4
Cell configuration	16S1P
Bluetooth	Yes — Epoch Li-Ion app, iOS and Android
Self-heating	Yes — internal heating pads
Victron communications	Yes — CAN-bus to Victron GX (DVCC)
Cell balancing	2 A active balancing
Low-temperature charge protection	Heater on at 0 °C; charging resumes at 5 °C
ELECTRICAL	
Nominal voltage	51.2 V
Nominal capacity	125 Ah
Stored energy	6.40 kWh / 6,400 Wh
Operating voltage range	41.6–58.0 V
Maximum charge voltage	58.0 V
CURRENT	
Maximum continuous discharge	150 A
Peak discharge	300 A for up to 10 seconds
Maximum continuous charge	150 A
Recommended charge current	Up to 62.5 A (50% of capacity)
Series connections	Not approved for this model
Parallel connections	Max. 15 batteries
Maximum configuration	15P, matched batteries and rated equipment
Maximum 48V parallel bank	1,875 Ah / 96.00 kWh
TEMPERATURE	
Charge temperature	−30 to 55 °C / −22 to 131 °F (with internal heating)
Discharge temperature	−20 to 55 °C / −4 to 131 °F
Storage temperature	0 to 35 °C / 32 to 95 °F, up to 1 year; −20 to 45 °C (−4 to 113 °F) for up to 1 month
MECHANICAL AND ENVIRONMENTAL	
Dimensions (L × W × H)	25.2 × 9.65 × 8.66 in (640 × 245 × 220 mm)
Weight	110 lb / 50 kg
Case	ABS plastic
Terminals	Threaded inserts, red (+) / black (−) — use bolts that match the terminal thread and tighten securely; do not over-tighten

Enclosure	IP54 — dust-protected, splash resistant; not for submersion
Cycle life	7,000+ cycles
Warranty	11-year manufacturer warranty
PROTECTION AND COMPLIANCE	
Battery management	Built-in smart BMS
Protection functions	Overcharge, over-discharge, over-current, short circuit, high- and low-temperature disconnects
Compliance marks	CE, RoHS, WEEE
Transport	UN 38.3, Class 9

Charger settings are in Section 10.

FIGURE 4-1 · OUTLINE DIMENSIONS

MODEL-SPECIFIC DATA

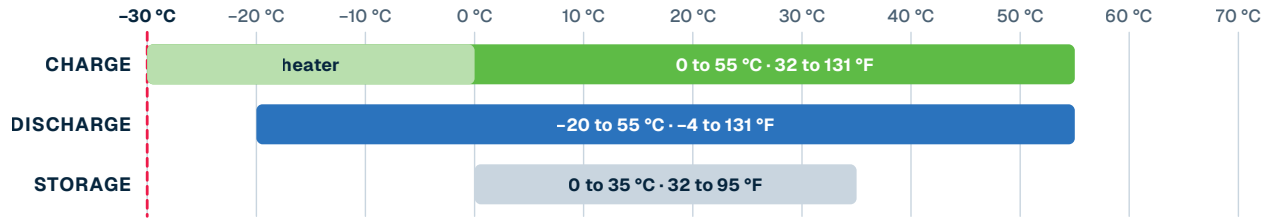
Outline envelope only; case features and terminal hardware are not shown.



Overall 25.2 in L × 9.65 in W × 8.66 in H. Allow extra clearance above the terminals for cable bend radius, terminal covers and inspection.

FIGURE 4-2 · TEMPERATURE OPERATING WINDOWS

MODEL-SPECIFIC DATA

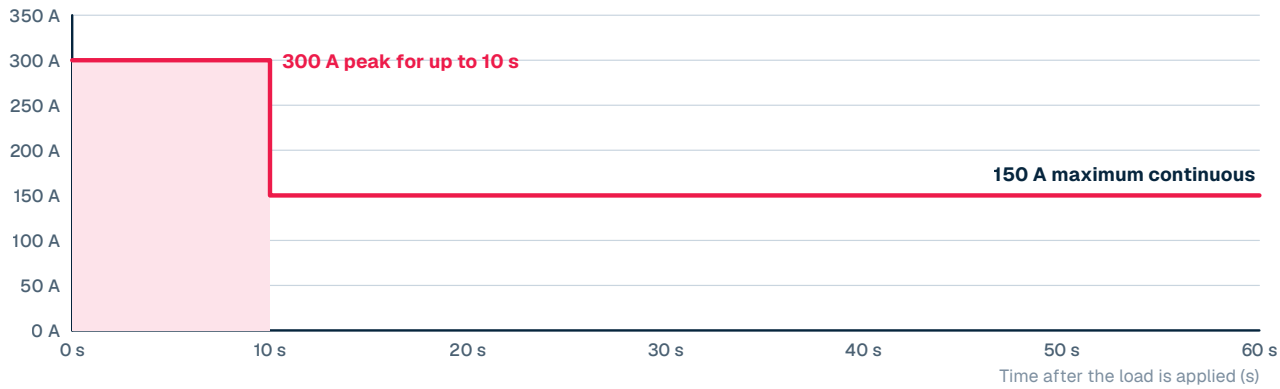


Charging from −30 °C uses the internal heater (light green): below 0 °C it warms the cells with a charger connected; charging resumes above 5 °C.

Storage bar shows the recommended storage range (up to 1 year; −20 to 45 °C (−4 to 113 °F) for up to 1 month).

FIGURE 4-3 · ALLOWABLE DISCHARGE CURRENT OVER TIME

MODEL-SPECIFIC DATA



The peak rating is for short start-up surges from inverters, motors and compressors. Any load lasting longer than 10 seconds must stay at or below 150 A.

05 PLANNING YOUR SYSTEM

Most installation problems can be prevented before the first cable is attached. Size the loads, the wiring and the protection to the battery ratings first.

PRE-INSTALLATION CHECKLIST

- ☐ Battery case is undamaged, the terminals are clean, and there is no swelling, leak, loose hardware or unusual odor.
- ☐ Battery model, voltage, capacity and current ratings match the application.
- ☐ The tray or mounting location fits the 25.2 in L × 9.65 in W × 8.66 in H case, with clearance for terminals, cables, covers and ventilation.
- ☐ Every charging source is configured for 48V LiFePO4 charging (Section 10).
- ☐ All batteries in a bank are the same model, age, capacity and state of charge.
- ☐ The main fuse or circuit breaker is DC-rated and selected for the wire, the load and the system voltage.
- ☐ Cables and lugs are sized for current, length, voltage drop and the installation environment.
- ☐ Polarity is clearly identified at every connection point and verified before the final connections.
- ☐ Terminal hardware and protective covers are ready.
- ☐ The Epoch Li-Ion app, or another approved monitoring method, is available for commissioning.

MATCHING LOADS TO THE CURRENT RATINGS

Add up the current of every load that can run at the same time. The total must stay at or below **150 A continuous**. The **300 A** rating is only for short start-up surges from inverters, motors and compressors, lasting up to 10 seconds.

- **Trolling motors and pumps:** use the motor manufacturer's maximum current draw, not its average.
- **Inverters:** the inverter's DC input current, not its AC output, must stay within 150 A. At 51.2 V, 150 A is about 7,680 W of DC input; usable AC output is lower because of conversion losses. Check the inverter's rated input current.
- **Banks:** parallel banks share current between batteries only when the wiring is balanced (Section 8).

DEFINITION

C-rate

Current relative to capacity. For this 125 Ah battery, 1C = 125 A and 0.5C = 62.5 A. Lower C-rates mean less heat and voltage drop.

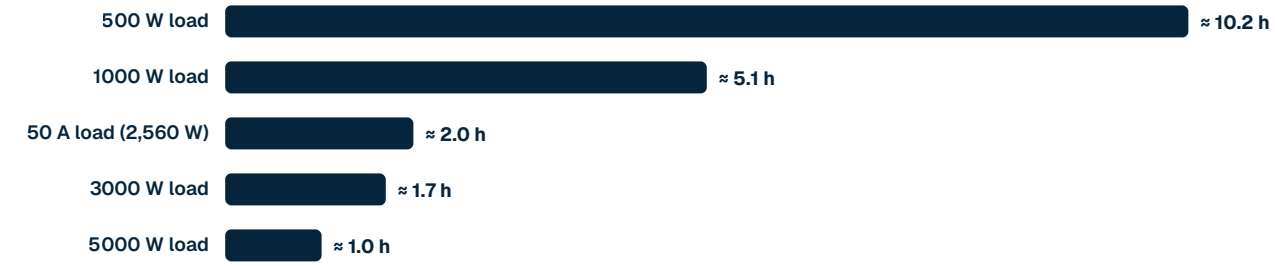
ESTIMATING RUNTIME

For planning, use 80% of the nominal energy: 6,400 Wh × 0.8 ≈ **5,120 Wh** per battery. Then:

Runtime (hours) = usable Wh ÷ load (W)

FIGURE 5-1 · ESTIMATED RUNTIME BY LOAD

MODEL-SPECIFIC DATA



Runtime (h) = 5,120 Wh ÷ load (W). DC loads at 25 °C on a new, fully charged battery; real results vary.

Calculated from 5,120 Wh planning energy. Inverter and converter losses, cabling, temperature, battery age, BMS limits and duty cycle change real results. For a parallel bank, multiply usable energy by the number of batteries.

05

CABLES AND OVERCURRENT PROTECTION

Choose conductors for the maximum current, circuit length, allowable voltage drop, ambient temperature and the code that applies to your installation (for example marine, RV or electrical codes). Install a DC-rated fuse or circuit breaker as close as practical to the battery positive terminal, sized to protect the smallest conductor in the circuit, with suitable voltage and interrupt ratings.

DEFINITION

Inrush current

A brief current spike when a device is first connected or switched on, for example while an inverter charges its internal capacitors. Large inverters may need a pre-charge circuit.

DEFINITION

Voltage drop

Voltage lost in cables and connections as current flows. Long or undersized cables cause heat, low voltage at the load and early low-voltage cutoffs.

DEFINITION

Ampacity

The maximum current a conductor can carry continuously without exceeding its temperature rating. It depends on wire size, insulation and installation conditions.

06 INSTALLATION

Choose a location that keeps the battery dry, secure, ventilated and accessible, then mount it so it cannot move.

LOCATION

- Install in a clean, dry, accessible location protected from accidental impact.
- Allow airflow around the battery and connected equipment.
- Keep away from heat sources, sparks, open flames, fuel and flammable materials.
- Avoid prolonged direct sunlight and any location that exceeds the temperature limits (Section 4).
- Do not install where standing water can collect around the case or terminals, such as a bilge.

MOUNTING AND ORIENTATION

Secure the battery so it cannot slide, tip or strike nearby equipment during operation, vehicle or trailer motion, vessel motion or transport. Use a tray, strap, bracket, battery box or enclosure suited to the application and the battery's weight (110 lb / 50 kg). Do not rely on the terminals, terminal bolts or cables to restrain the battery, and do not place heavy equipment on the case.

Install the battery **upright** unless Epoch documentation for this exact model allows another orientation. Keep the top terminals and wiring protected from accidental contact.

TIP

Battery rooms and enclosures

Off-grid and solar banks are easiest to service in a dry, ventilated equipment room or battery enclosure near the inverter charger, with short, equal-length cables to the busbars.

⚠ **CAUTION**

The battery weighs about 110 lb / 50 kg. Use two people or a lifting aid, and lift by the end handles. Use proper lifting technique and avoid dropping the battery.

ENVIRONMENTAL PROTECTION

The IP54 enclosure is dust-protected and resists splashing water from any direction, but it is not waterproof: it is not designed for submersion, pressure washing, bilge flooding or continuous water exposure. For off-grid and solar installations, use a dry, ventilated equipment room or battery enclosure that keeps the battery within its temperature limits. In marine compartments, confirm the installation meets applicable marine electrical standards and the boat manufacturer's requirements.

NOTICE

Leave enough clearance above the terminals for cable bend radius, terminal covers and inspection. Do not force cables to bend sharply at the terminals.

FIT CHECK

Before final mounting, confirm: compartment or tray dimensions against 25.2 in L × 9.65 in W × 8.66 in H; lid clearance; hold-down method; cable routing and clearance; terminal protection; and access to the fuse and disconnect for service.

07 ELECTRICAL CONNECTIONS

Correct polarity, clean and tight connections, and properly sized protection are the foundation of a safe battery installation.

POLARITY

Connect positive (+) to positive and negative (–) to negative. Reverse polarity can damage the battery, charger, inverter, electronics or connected loads, and is excluded from warranty coverage.

⚠ DANGER

Before tightening the final connection, use a multimeter to confirm system polarity and voltage. Never rely only on cable color or assumptions.

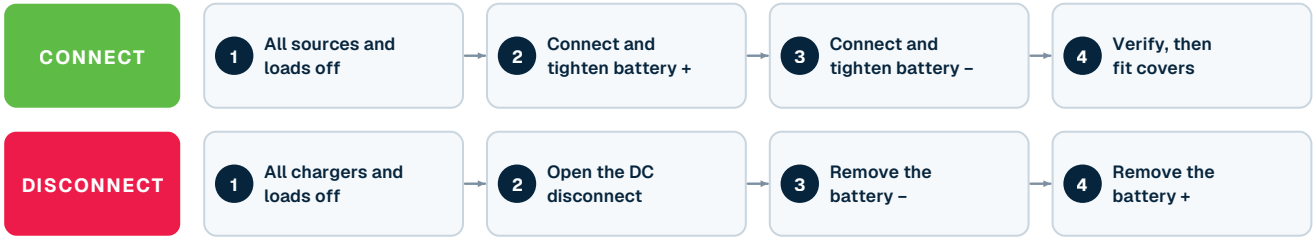
TERMINAL CONNECTION PROCEDURE

1. Turn off chargers, inverters, loads and DC disconnects before wiring.
2. Remove jewelry and use insulated tools.
3. Keep terminal caps or covers in place until each terminal is being wired.
4. Use clean, properly crimped lugs with flat contact surfaces.
5. Connect and tighten the positive terminal, then connect and tighten the negative terminal.
6. Tighten the terminal bolts securely. Do not over-tighten or damage the threaded inserts.
7. Install terminal boots or protective covers after final tightness is confirmed.

TIP

Loose terminals are a common cause of heat at the connection, and are excluded from warranty coverage. Recheck terminal tightness after the first trip and then monthly during active use.

FIGURE 7-1 · CONNECTION AND DISCONNECTION ORDER CONCEPTUAL DIAGRAM



CABLE AND PROTECTION REQUIREMENTS

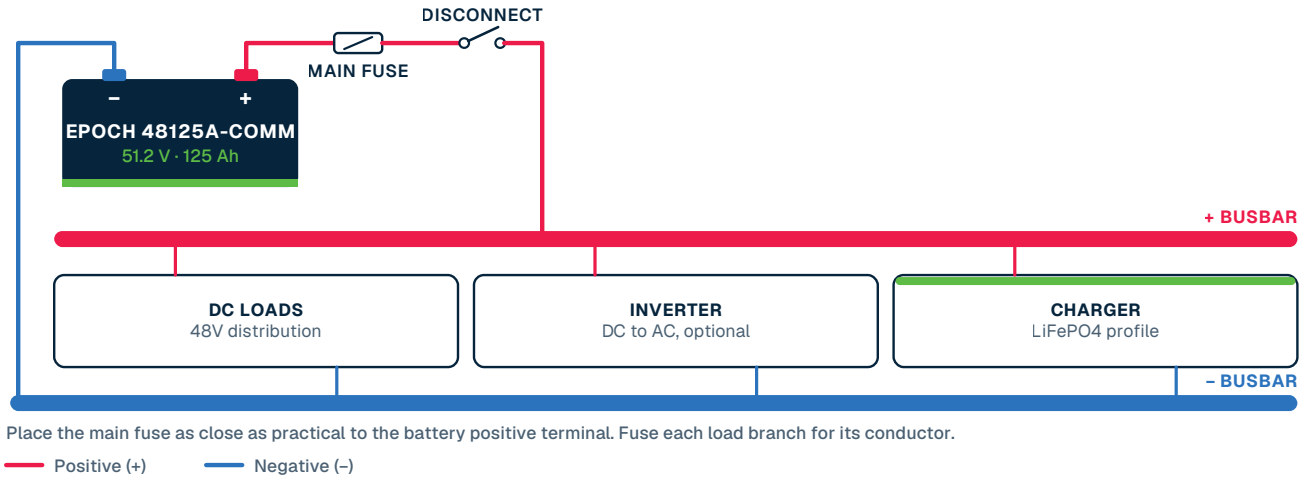
ITEM	REQUIREMENT
Cable size	Size conductors for maximum current, circuit length, voltage drop, ambient temperature and applicable code requirements.
Main protection	Install a DC-rated fuse or circuit breaker as close as practical to the battery positive terminal.
Ratings	Protection devices and switches must be rated for the system voltage and the available fault current.
Wire ampacity	The fuse or breaker must protect the smallest conductor in the circuit.

ITEM	REQUIREMENT
Lug stack	Keep the terminal stack flat and secure. Use a busbar if several conductors must connect to one battery terminal.
Cable routing	Route cables away from sharp edges, heat sources, moving parts, fuel lines and wet areas; use grommets through panels and support heavy cables.

⚠ WARNING

A fuse or breaker protects wiring and equipment from fault current. The battery BMS is not a substitute for correctly selected circuit protection.

FIGURE 7-2 · SINGLE-BATTERY 48V SYSTEM CONCEPTUAL DIAGRAM



Place the main fuse as close as practical to the battery positive terminal. Fuse each load branch for its conductor.

Positive (+) Negative (–)

Busbars simplify protected distribution and give one place to disconnect for service.

DISCONNECTING THE BATTERY

Turn off all chargers and loads, open the DC disconnect or breaker, remove the negative cable, then remove the positive cable. Cap or cover the terminals immediately.

08 PARALLEL BATTERY BANKS

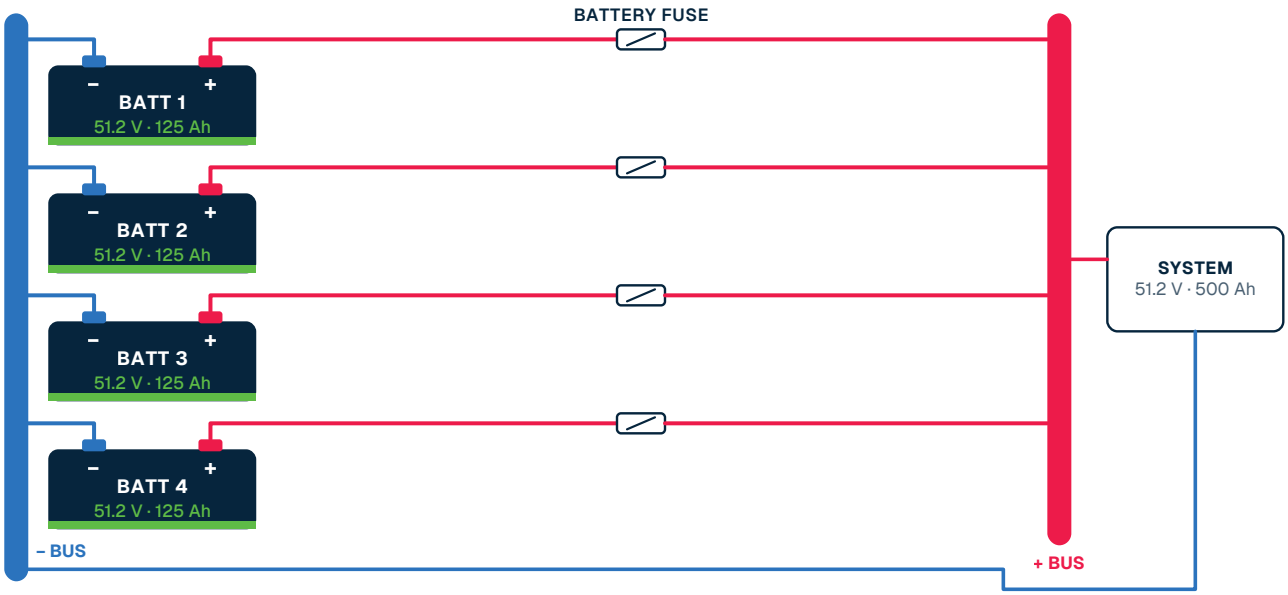
The 48125A-COMM supports up to 15 identical batteries in parallel to increase capacity while the nominal system voltage stays at 51.2 V. Series connection is not approved.

PARALLEL RULES

- Use only identical Epoch 48125A-COMM batteries of the same age and capacity; do not mix them with other batteries.
- Fully charge each battery separately before connecting it into the bank, so every battery starts at the same state of charge.
- For two batteries, take the positive feed from one battery and the negative feed from the other to balance the current paths.
- For three or more, use positive and negative busbars with identical cable lengths and sizes from each battery.
- Fit a DC-rated fuse or breaker on each battery's positive lead, rated for the 48V system voltage and that battery's current.
- Connect up to 15 batteries in parallel. Series connection is not approved.
- Link the batteries' RS485 ports so the bank reports as one system (Section 9).

BATTERIES	SYSTEM CLASS	NOMINAL VOLTAGE	CAPACITY	ENERGY
1P	48V	51.2 V	125 Ah	**6.40 kWh**
2P	48V	51.2 V	250 Ah	**12.80 kWh**
4P	48V	51.2 V	500 Ah	**25.60 kWh**
8P	48V	51.2 V	1,000 Ah	**51.20 kWh**
15P	48V	51.2 V	1,875 Ah	**96.00 kWh**

FIGURE 8-1 · PARALLEL BANK, UP TO 15P CONCEPTUAL DIAGRAM



4 of up to 15 batteries shown. Equal cable length and gauge from every battery to the busbars. Fuse each battery as the system design requires.

⚠ WARNING

Do not connect this model in series. Series wiring increases voltage and may exceed the battery design limits unless expressly approved in model-specific Epoch documentation.

08

BALANCED WIRING PRACTICES

- Charge each battery fully before connecting batteries into a bank.
- Use identical cable lengths and gauges for each battery in a parallel bank whenever practical.
- Connect loads and chargers through properly rated positive and negative busbars for larger banks.
- Fuse each battery when required by the system design and applicable standards.
- Do not daisy-chain batteries where unequal cable resistance could cause uneven charging or discharging.

DEFINITION

Series and parallel

Series: + of one battery to – of the next; voltages add, capacity stays the same. Parallel: + to + and – to –; capacities add, voltage stays the same. Only parallel is approved for this model.

CHARGING AND MONITORING A BANK

The recommended charge current is up to 50% of the battery or bank capacity: 62.5 A for one battery; 2P (250 Ah): 125 A · 4P (500 Ah): 250 A · 8P (1,000 Ah): 500 A · 15P (1,875 Ah): 937.5 A, within charger, wiring and system limits. Check each battery in the Epoch Li-Ion app; a battery that reads differently from the others may need attention.

⚠ CAUTION

Do not hot-connect batteries. Before energizing a bank, confirm charger voltage, inverter low-voltage settings, conductor insulation rating, enclosure clearance and overcurrent protection. Pre-charge large inverters where required.

09 VICTRON INTEGRATION AND APPLICATIONS

The 48125A-COMM communicates with Victron GX devices over CAN-bus. Connected to a Cerbo GX or Ekrano GX with DVCC on, it reports its state of charge, voltages, temperatures and alarms, and sends the limits that Victron chargers and inverter chargers follow.

DATA PORTS

PORT	FUNCTION
RS485-IN	Battery link: receives data from the previous battery in the chain. Unused on the first battery.
RS485-OUT	Battery link: sends data to the next battery in the chain. Unused on the last battery.
CAN	Connects the first battery in the chain to the GX device. Unused on the other batteries.

LINKING BATTERIES

In a bank, link the batteries in a chain with RJ45 patch cables so they share data. The batteries select a master automatically — there are no DIP switches or addresses to set — and the master reports the whole bank to the GX device, including voltage, current, state of charge, alarms and cell-level data.

1. Make and check all power connections first (Section 8), with chargers and loads switched off.
2. Run a standard RJ45 patch cable from RS485-OUT on Battery 1 to RS485-IN on Battery 2. Continue from RS485-OUT on Battery 2 to RS485-IN on Battery 3, and so on down the chain.
3. Connect the CAN port of Battery 1 to the GX device with the supplied CAN cable. Make only one CAN connection per bank.
4. Fit the caps on all unused ports.

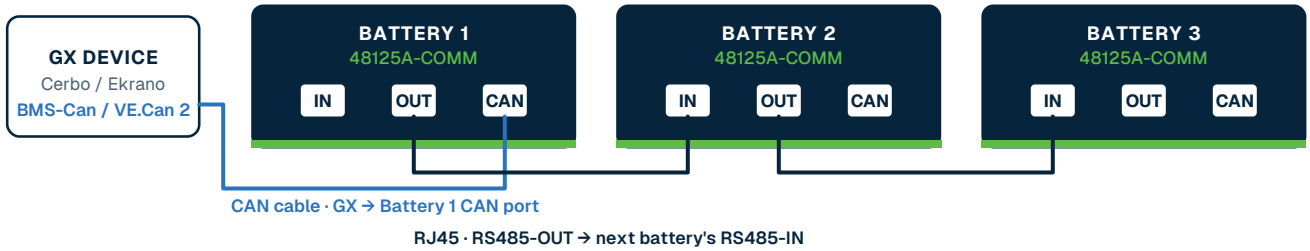
A CAN communication cable is supplied with each battery. If more length is needed, a standard Cat 7 Ethernet patch cable can be used between the battery's CAN port and the GX port listed below.

DEFINITION

DVCC

Distributed Voltage and Current Control: a GX feature that applies the battery's limits to every connected Victron charger and inverter charger.

FIGURE 9-1 · VICTRON CAN DAISY CHAIN CONCEPTUAL DIAGRAM



Power wiring (busbars and fuses) is not shown. Only Battery 1's CAN port is connected.

The batteries select a master automatically; the GX shows the linked bank as one battery.

GX CONFIGURATION RECOMMENDED

Cerbo GX (MK1)

1. Connect the battery's CAN port to the GX's BMS-Can port.
2. No further setup is needed: the GX detects the battery automatically.

Cerbo GX MK2 and Ekrano GX

1. Connect the battery's CAN port to the GX's VE.Can 2 port, then power on the GX.
2. Settings → Services → VE.Can port 2: set the CAN-bus speed to 500 kbit/s.
3. Settings → DVCC: turn DVCC on, and set Shared voltage sense (SVS) and Shared temperature sense (STS) to On.
4. Settings → System setup → Battery monitor: select the CAN-LV battery once it appears.
5. Return to the device list. The battery appears as a CAN-LV device showing voltage, current, state of charge and temperature.

Menu names can differ between GX firmware versions; see the GX device manual.

DATA REPORTED TO THE GX

- Battery voltage, current and state of charge (SOC)
- Internal and external temperature readings
- Individual cell voltages
- Up to 10 BMS alarm states, such as cell imbalance, over-voltage and under-voltage
- Discharge current limit (DCL) and maximum charge voltage limit (CVL)

> *NOTICE*
>
> With DVCC on, the GX applies the battery's limits to the Victron chargers and inverter chargers in the system. DVCC settings can lower these limits but not raise them, and the chargers' own absorption and float settings are overridden while the GX is in control. With CAN communication, the battery's integrated shunt supplies state of charge, so a separate battery monitor is not required.

WITHOUT A GX DEVICE

Without a GX device, Victron chargers cannot receive the battery's limits. Program each Victron solar charge controller and inverter charger with a user-defined LiFePO4 profile using the values in Section 10.

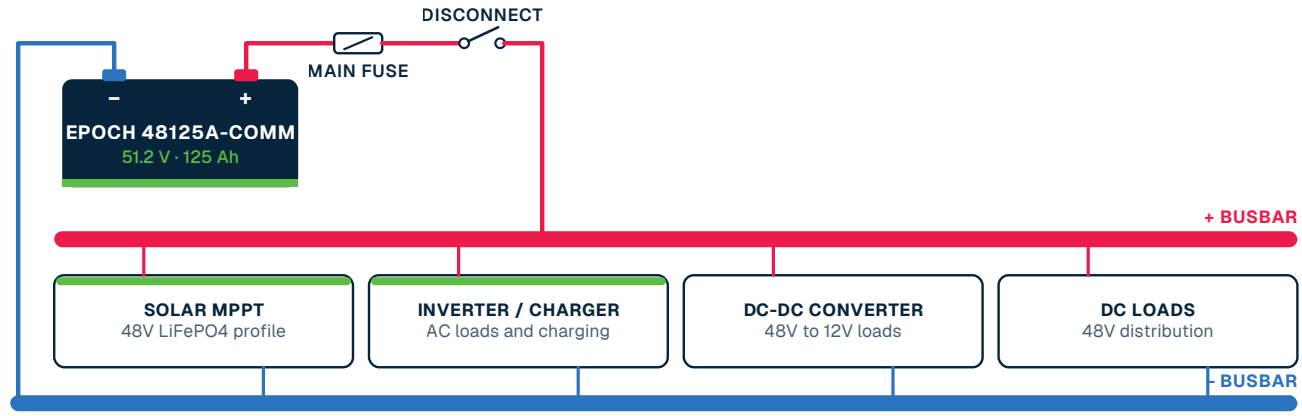
OFF-GRID, SOLAR AND MOBILE SYSTEMS

At 51.2 V, the 150 A continuous rating is about 7,680 W of DC power before inverter losses. The 300 A, 10-second peak rating covers start-up surges from inverters, motors and compressors; any load that lasts longer must stay within 150 A per battery. In a parallel bank, current divides evenly only when the wiring is balanced. Set the inverter's low-voltage shutdown above the bottom of the operating range (41.6 V) so the inverter stops before the BMS disconnects the battery.

GOLF CARTS AND UTILITY VEHICLES

Confirm that the motor controller's battery current stays within 150 A continuous for one battery, and that acceleration and hill-climbing peaks stay within 300 A for no more than 10 seconds. Secure the battery against vibration, keep it upright, and protect it from water spray: IP54 is splash resistant, not waterproof. Charge with a 48V LiFePO4 charger set to the values in Section 10.

FIGURE 9-2 · TYPICAL 48V OFF-GRID OR SOLAR LAYOUT CONCEPTUAL DIAGRAM



Green bar = charging source. Every source must use 48V LiFePO4 settings, and combined charge current must stay within the battery rating.

Positive (+) Negative (–)

For planning only. Verify charger settings, cable size, fuse ratings and system voltage for your installation.

> *NOTICE*
>
> This is a deep-cycle battery, not a cranking battery. Install it in a dry, protected location within its temperature limits.

09

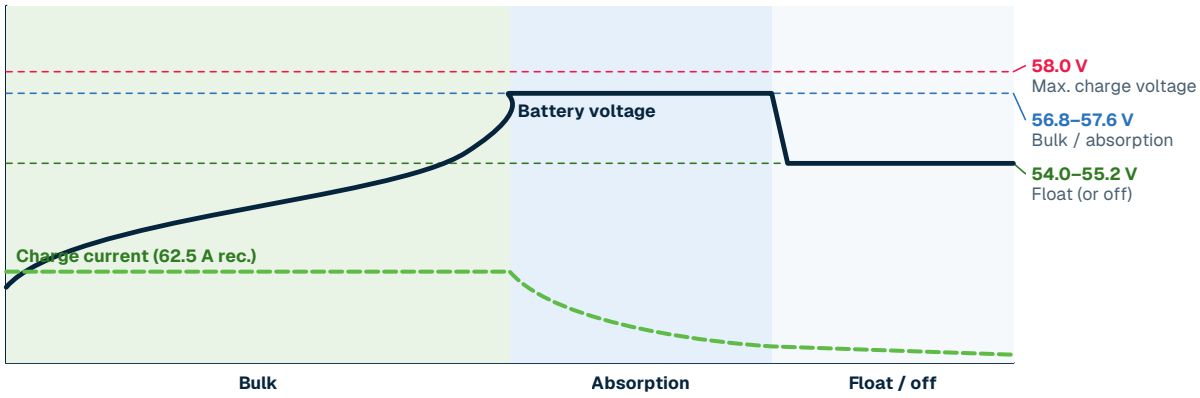
10 CHARGING

Proper charging is essential for safety, service life and accurate Bluetooth monitoring. Use charging equipment designed for LiFePO4 and program it within the settings below.

CHARGING PROFILE

SETTING	RECOMMENDED VALUE
Bulk / absorption voltage	56.8–57.6 V
Float voltage	54.0–55.2 V — or disabled where the charger allows it
Equalization	Disabled — do not use lead-acid equalization or desulfation modes
Temperature compensation	0 mV/°C (disabled)
Maximum charge current	150 A
Recommended charge current	Up to 62.5 A for one battery; up to 50% of bank capacity for multi-battery banks
Charge temperature	–30 to 55 °C / –22 to 131 °F (with internal heating)

FIGURE 10-1 · LIFEPO4 CHARGE PROFILE CONCEPTUAL DIAGRAM



Bulk = constant current · Absorption = constant voltage

Shape only, not to scale. Voltages are the recommended settings for this model.

BEFORE FIRST USE

1. Inspect the battery and verify that no damage occurred during shipping or handling.
2. Verify polarity and charger settings before connecting the charger.
3. Fully charge the battery with a compatible LiFePO4 charger before first use, and before connecting several batteries into a bank.
4. Confirm the battery status in the Epoch Li-Ion app after charging.

CHARGING SOURCES

Suitable sources include 48V LiFePO4 battery chargers such as the Epoch 48V 15A Lithium Battery Charger, solar charge controllers with a programmable or LiFePO4 profile, DC-to-DC chargers for alternator charging, and converters or inverter chargers that can be set to the values above. A charger below the recommended 62.5 A is suitable; it simply takes longer. If a charger requires absorption-time or end-current settings, use the values above and avoid long lead-acid absorption periods.

Victron systems: with CAN communication to a GX device and DVCC on, the GX applies the battery's charge voltage limit to the Victron chargers and overrides their own absorption and float settings (Section 9).

DEFINITION

Bulk and absorption

Bulk charges at constant current until the set voltage is reached. Absorption then holds that voltage while the current tapers off as the battery fills.

DEFINITION

Float

A lower holding voltage after charging. LiFePO4 does not need float charging, so turning float off is preferred where the charger allows it.

CHARGING IN COLD WEATHER

This model has internal heating. When the cells reach 0 °C / 32 °F, the BMS stops charging and uses the incoming charge current to power the internal heater. Charging resumes automatically when the cells reach 5 °C / 41 °F. The heater runs only while a charger is connected and supplying at least 0.5 A; it does not use the battery's stored energy. In sub-freezing weather, leave the charger connected and switched on so the heater can warm the cells, and make sure the charging source can supply at least 0.5 A in the cold. Solar charging stops at night, so the heater runs only while the panels are producing. Discharging works down to −20 °C / −4 °F without heating. Never bypass the protection.

FIGURE 10-2 · LOW-TEMPERATURE CHARGE PROTECTION CONCEPTUAL DIAGRAM



CHARGING PRECAUTIONS

- Charge in a clean, dry, ventilated location away from flammable materials.
- Do not program a charge voltage above the recommended bulk/absorption range (56.8–57.6 V) or exceed the maximum charge current (150 A).
- Do not use lead-acid repair, recovery, reconditioning, desulfation or automatic equalization modes.
- Monitor the battery during the first full charge, and stop charging if the battery, charger, cables or terminals become unusually hot or show signs of damage.

TIP

Estimating charge time

Bulk time ≈ amp-hours to replace ÷ charger current. Example: replacing 100 Ah takes about 1.6 h at 62.5 A, plus absorption time. This is an estimate only.

NOTICE

Not all chargers can do multistage lithium charging. If yours cannot be fully programmed, verify that its bulk/absorption voltage is within range and that equalization and temperature compensation are disabled. Consult the charger manual or manufacturer.

11 BLUETOOTH MONITORING

The 48125A-COMM includes Bluetooth monitoring through the Epoch Li-Ion app for iOS and Android, so you can check the battery without installing a separate gauge.

FIGURE 11-1 · CONNECTING TO THE EPOCH LI-ION APP CONCEPTUAL DIAGRAM



APP SETUP

1. Download the Epoch Li-Ion app from the Apple App Store or Google Play.
2. Enable Bluetooth on the mobile device.
3. Allow the required Bluetooth permissions when prompted. Some Android devices also require location services for Bluetooth scanning.
4. Open the app near the battery and select the battery from the device list.
5. Confirm the displayed voltage, temperature, state of charge and status values before placing the system into service.

INFORMATION AVAILABLE

READING	WHAT IT SHOWS
State of charge	Remaining capacity as a percentage
Voltage and current	Battery voltage and charge or discharge current
Temperature	Battery temperature readings
Protection status	Active BMS protections and alarms
Charge and discharge switches	Turn charging and discharging on or off independently

DEFINITION

State of charge (SOC)

The estimated energy remaining, as a percentage of full. Depth of discharge (DoD) is the opposite: 100% minus SOC.

NOTICE

While the POWER button has discharge switched off, the app cannot switch discharge on or off. The button and the app are not a means of isolation: for storage or service, open a DC disconnect switch or remove the battery cables.

GETTING THE MOST FROM THE APP

- Check readings at installation, after charging, and after the first few high-current loads.

- Use app data as a monitoring aid, not a substitute for safe wiring or correct charger settings. If readings look wrong, verify with a calibrated multimeter where safe.

> *NOTICE*
>
> Bluetooth range, displayed data, app screens and firmware features may vary by mobile device, app version and battery production revision.

12 OPERATION AND STORAGE

Operate within the limits below, avoid leaving the battery empty, and store it partly charged in a cool, dry place.

OPERATING LIMITS

Continuous discharge limit	150 A
Peak discharge limit	300 A for up to 10 seconds
Continuous charge limit	150 A
Operating voltage range	41.6–58.0 V
Discharge temperature	–20 to 55 °C / –4 to 131 °F
Charge temperature	–30 to 55 °C / –22 to 131 °F (with internal heating)

DEPTH OF DISCHARGE

LiFePO4 batteries provide more usable energy than lead-acid batteries, but routine operation at a moderate depth of discharge can improve long-term service life. Avoid leaving the battery fully depleted. If the voltage falls to the bottom of the operating range, the BMS disconnects the load; recharge promptly.

STORAGE

- Store in a clean, dry location at 0 to 35 °C / 32 to 95 °F whenever practical, away from direct sunlight, moisture, flammable materials and conductive debris.
- For long-term storage, charge to about 30–50% state of charge.
- Disconnect loads and chargers during storage unless the system is designed for standby maintenance.
- The POWER button and the app's discharge switch do not fully isolate the battery: small loads such as LED lighting can keep drawing power. For storage, open a DC disconnect switch or remove the battery cables.
- **Check voltage or app state of charge at least every 3 months** and recharge if needed. Batteries left uncharged for more than three months are excluded from warranty coverage.
- Protect the terminals from accidental short circuit while the battery is stored or transported.

DEFINITION

Low-voltage protection

A BMS disconnect that stops discharge before the cells are damaged. Small standby loads can keep draining a battery after shutoff, so disconnect loads before storage.

⚠ CAUTION

A battery stored at very low state of charge can enter low-voltage protection and may not be recoverable if left discharged for an extended period. Prolonged storage in a fully discharged state is excluded from warranty coverage.

RETURNING TO SERVICE AFTER STORAGE

1. Inspect the case, terminals and cables for damage or contamination.
2. Confirm resting voltage and Bluetooth status.
3. Fully charge with compatible LiFePO4 settings.
4. Verify that all connections are clean and secure before applying loads.

13 MAINTENANCE

The 48125A-COMM needs no watering or acid service. Routine inspections keep it safe and help catch wiring problems early.

MAINTENANCE SCHEDULE

INTERVAL	ACTION
Before each trip or use	Inspect case, terminals, cables, fuses, disconnects and mounting hardware and app status.
Monthly during active use	Check terminal tightness, cable condition, charger settings, app data and resting voltage.
At least every 3 months in storage	Check state of charge and recharge if needed.
Annually	Inspect terminal hardware, cable insulation, wiring layout, protection devices, battery tray, ventilation and charger settings.
After any fault, impact, water exposure or severe vibration	Stop use, inspect carefully, record symptoms and contact Epoch support before reuse.

CLEANING AND TERMINAL MAINTENANCE

- Turn off and disconnect chargers and loads before maintenance.
- Clean the outside of the case with a dry or slightly damp cloth. Do not use solvents, abrasive cleaners, steam or pressure washing.
- Keep terminals dry and free of corrosion, salt, dirt and conductive debris.
- If a connection has overheated, replace the affected lugs, hardware and protection devices; do not simply retighten damaged parts.
- If terminal hardware is loose and shows no heat damage, tighten it securely. Do not over-tighten or damage the terminals.

VOLTAGE AND BLUETOOTH CHECKS

Use a reliable multimeter to check terminal voltage and charger output. Resting voltage changes slowly on LiFePO4 batteries, so it is not a precise state-of-charge indicator. For a more complete health check, use the Bluetooth app, a shunt-based battery monitor and load testing. Record results in the maintenance log (Appendix C).

TIP
Log the app state of charge and resting voltage at the same point each time (for example, after a full charge and an hour of rest) so readings can be compared over the years.

14 TROUBLESHOOTING

Make the system safe before diagnosing: turn off chargers and loads when safe, and avoid short circuits. Stop testing if there is smoke, heat, odor, swelling, liquid, arcing or visible damage.

SYMPTOM	LIKELY CAUSES	CORRECTIVE ACTIONS
Battery will not charge	**Charger off or not set for LiFePO4, reverse polarity, BMS protection, battery too cold, blown fuse.**	Confirm charger settings, power and polarity. Check fuses and disconnects. Warm the battery into its charge range if cold. Check app status and charger output.
Battery voltage is low	**Battery discharged, parasitic load, BMS low-voltage protection.**	Disconnect loads. Charge with a compatible 48V LiFePO4 charger. Check for parasitic draws before storage.
Low runtime	**Higher load than expected, battery not fully charged, cold temperature, imbalance in a bank.**	Fully charge. Measure load current. Check app SOC and wiring balance. Test one battery at a time if in a bank.
Fuse or breaker trips	**Short circuit, overload, inrush current, undersized protection, damaged cable.**	Disconnect loads. Inspect wiring. Confirm load current and protection rating. Replace damaged parts.
Battery or cables are hot	**Loose connection, undersized cable, excessive current, poor ventilation, charger fault.**	Stop use, let components cool, inspect and replace damaged parts, verify current and cable sizing and charger settings.
Charging paused in cold weather	**Expected while the heater warms cells below 0 °C / 32 °F.**	Leave the charger connected and supplying at least 0.5 A; charging resumes automatically when the cells reach 5 °C / 41 °F. Contact support if charging never resumes.
No output at the terminals	**Discharge switched off with the POWER button or in the app; BMS protection active.**	Check the POWER button and the app's discharge switch, then check the app for protection events before reconnecting loads.
GX device does not show the battery	**Cable in the wrong GX port, CAN speed not set, cable fault, battery monitor not selected.**	Check that the cable runs from the battery's CAN port to the BMS-Can port (Cerbo GX MK1) or the VE.Can 2 port set to 500 kbit/s (Cerbo GX MK2, Ekrano GX), then select the battery under Battery monitor.
Bluetooth will not connect	**Bluetooth off, permission not granted, too far away, another device connected, app issue.**	Enable Bluetooth and permissions (and location on some Android devices). Move closer. Restart the app or phone.
Unexpected shutoff	**BMS protection: low voltage, overcurrent, short circuit, or high/low temperature.**	Remove load or charger. Check app status, temperature, voltage, wiring and protection devices before reconnecting.
Water exposure or visible damage	**Spray, submersion, impact, overheating or electrical fault.**	Stop use. Isolate the battery away from combustibles. Dry the exterior only; do not open it. Contact Epoch support before reuse.

⚠ WARNING

Do not bypass protection devices or repeatedly reset a fuse, breaker, charger or BMS fault without identifying the cause. Repeated faults can indicate unsafe wiring or an equipment mismatch.

WHEN TO CONTACT SUPPORT

Contact Epoch Batteries support at 1-888-501-1846 or support@epochbatteries.com if a problem continues after these checks, or immediately after any impact, water intrusion, overheating or visible damage. Have the model, serial number, purchase date, installation details, charger settings, fuse or breaker rating and any app readings ready.

15 WARRANTY AND SUPPORT

The battery carries an 11-year manufacturer warranty against qualifying defects in materials and workmanship, subject to the Epoch Batteries warranty terms and claim procedures.

REGISTRATION AND COVERAGE

- **Register within 90 days of purchase** for full warranty coverage. If the battery is not registered in that time, the warranty period begins from the battery's original manufacturing date.
- Coverage applies only to the original purchaser and is not transferable. Proof of ownership is required for any claim.
- Full terms: epochbatteries.com/pages/11-year-warranty. Register at epochbatteries.com/pages/product-registration.

WARRANTY EXCLUSIONS

Coverage may be denied or voided when a failure is caused by, for example:

- Misuse, abuse, neglect, improper handling, installation, maintenance or service; an unsecured or improperly secured battery.
- Incorrect polarity, short circuit, overcurrent, loose or corroded terminals, poor crimps, undersized cables or missing overcurrent protection.
- Use outside the specified voltage, current, temperature or environmental limits, including current draw above the rated discharge, or repeated engine starting.
- Storage above 140 °F or below –40 °F, prolonged storage fully discharged, or leaving the battery uncharged for more than three months.
- Series connection, or parallel connections beyond the manufacturer's limits, or mixing different models, capacities, ages or chemistries in a bank.
- Water intrusion, submersion, pressure washing, impact, fire, flood or other external causes; faults in the external electrical system.
- Unauthorized opening, modification, disassembly, repair or tampering; incompatible chargers, accessories or system components.

WARRANTY CLAIM PROCEDURE

1. Stop using the battery if a defect or unsafe condition is suspected.
2. Gather proof of purchase, model number, serial number, installation date, system configuration, charger model and a description of the issue and when it began.
3. Take photos of the installation, terminals, cables, fuses, charger settings and any visible damage. Record voltage, app data and charger display information if available.
4. Submit a request through the Warranty Portal (warranty.epochbatteries.com) or contact Epoch support. If approved for evaluation, Epoch provides an RMA number and shipping instructions.
5. Do not ship a battery without a valid RMA. Package it in compliance with lithium battery shipping rules, using a UN-approved lithium battery box where required.

SUPPORT

Phone	**1-888-501-1846**
Email	**support@epochbatteries.com**
Website	**EpochBatteries.com**
Warranty portal	**warranty.epochbatteries.com**

A GLOSSARY

Absorption
The charging stage that holds a set voltage (56.8–57.6 V for this model) while current tapers as the battery fills.

Active balancing
A BMS function that moves charge between cells to keep their voltages matched across the whole state-of-charge range, not only at full charge.

Ampacity
The maximum current a conductor can carry continuously without exceeding its temperature rating; it depends on size, insulation and installation.

Ampere-hour (Ah)
A measure of charge capacity. In principle, a 125 Ah battery can supply 12.5 A for 10 hours or 125 A for 1 hour under rated conditions.

BMS (battery management system)
Electronics inside the battery that monitor cell voltage, current and temperature and disconnect the battery to protect the cells.

Bulk
The constant-current charging stage, before the absorption voltage is reached.

Busbar
A solid conductor bar that gives several cables a common, low-resistance connection point.

C-rate
Current expressed relative to capacity. For this battery 1C = 125 A, 0.5C = 62.5 A and 0.2C = 25 A.

CAN bus
A two-wire data network. Here it connects the battery bank to a Victron GX device, so the system can read the battery's data and limits.

Cranking battery
A starting battery designed to deliver very high current for a few seconds to start an engine. This model is not cranking-rated.

CVL / DCL
Charge voltage limit and discharge current limit: values the battery's BMS sends to a Victron GX device, which DVCC applies to the chargers and inverter chargers.

Cycle life
The number of charge–discharge cycles a battery delivers before its capacity falls to a defined end-of-life level under stated test conditions.

Deep-cycle battery
A battery designed for steady current over long periods and for repeated deep discharge and recharge.

Depth of discharge (DoD)
How much of the capacity has been used, as a percentage: 100% minus state of charge.

DVCC

Distributed Voltage and Current Control: a Victron GX feature that lets the battery BMS set charge voltage and current limits for all connected chargers.

Equalization

A controlled overcharge used on some lead-acid batteries. It must be disabled for LiFePO4.

Float

A lower holding voltage after charging. LiFePO4 does not need float; turning it off is preferred where the charger allows.

Inrush current

A brief current spike when a device such as an inverter is first connected and its internal capacitors charge.

IP54

An IEC 60529 enclosure rating: dust-protected (5) and protected against splashing water from any direction (4). Not waterproof.

kWh / Wh

Units of energy. Energy = voltage × amp-hours: 51.2 V × 125 Ah = 6,400 Wh = 6.40 kWh.

LiFePO4

Lithium iron phosphate, a lithium-ion chemistry known for thermal stability and long cycle life; 3.2 V nominal per cell.

Master battery

In a linked bank, the battery selected automatically to collect data from the others and report the whole bank to the GX device.

Nominal voltage

The typical average voltage during discharge: 51.2 V for 16 LiFePO4 cells in series.

Parallel connection

Positive to positive and negative to negative. Capacity adds; voltage stays the same.

Parasitic load

A small continuous draw from connected devices that stay powered in standby, such as clocks, alarms or monitors.

Pre-charge

Limiting inrush current by charging an inverter's capacitors through a resistor before closing the main connection.

RMA

Return merchandise authorization: the approval number required before a product is shipped to Epoch.

RS485

A wired serial data standard. The battery-link ports on this battery are labeled RS485-IN and RS485-OUT.

Self-heating

An internal heater that warms the cells before charging in cold weather. On this model it runs only while a charger is connected.

Series connection

Positive of one battery to negative of the next. Voltage adds; capacity stays the same. Not approved for this model.

Shunt

A precision, low-resistance current sensor. This battery's BMS has an integrated shunt for state-of-charge calculation.

State of charge (SOC)

The estimated remaining energy as a percentage of full.

Temperature compensation

A charger feature that changes voltage with temperature for lead-acid batteries. Set to 0 / disabled for LiFePO4.

UN 38.3

The United Nations test standard for the safe transport of lithium batteries.

Voltage drop

Voltage lost in cables and connections as current flows; excessive drop causes heat and low voltage at the load.

B COMMISSIONING RECORD

Complete this record at installation. Keep it with the battery for support, maintenance and warranty documentation.

Battery model / SKU	48125A-COMM
Serial number(s)	
Purchase date	
Registration date	
Installation date	
Installer / owner	
Application	
System voltage	
Number of batteries and configuration	
Initial resting voltage	
Initial state of charge (app)	
Charger model and settings	
Main fuse / breaker rating and location	
Cable gauge and length	
Victron GX / CAN communication verified	
Terminal hardware tightness confirmed	
Polarity verified with multimeter	
Bluetooth app connected	
Low-temperature charge settings verified	

C MAINTENANCE LOG

DATE	VOLTAGE / SOC	INSPECTION NOTES	ACTION TAKEN

A

EPOCH BATTERIES

POWERING ADVENTURE.
SUSTAINING TOMORROW.

ADVANCED LITHIUM BATTERY SYSTEMS

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954 Ponce de Leon Ave, Suite 401, San Juan, PR 00907, USA

48V 125Ah Essential Series LiFePO4 Battery · Model 48125A-COMM · User Manual Rev V01 (2026-10-15). Specifications may change without notice; use the latest documentation at EpochBatteries.com.