



LiFePO4 BATTERY USER MANUAL



DC-LFP-BLK-100

DC-LFP-BLK-135

DC-LFP-BLK-20

PLEASE READ THIS MANUAL CAREFULLY BEFORE OPERATION AND MAINTENANCE,
FOLLOW ALL PROVIDED WARNING & CAUTION, AND KEEP IT FOR FUTURE REFERENCE.

WARNING & CAUTION

- The lithium iron phosphate battery should be operated by a certified technician. Please read thoroughly the warnings, cautions and the warranty before installation or use.
- While working on the battery please wear protective eyeglasses, insulating gloves and clothing. It is important not to wear any metallic objects such as watches, bracelets or similar wrist jewelry.
- Installation should be done at a place where the floor is flat and level. There must be no flammable or explosive materials and should be minimal dust and dirt in the area.
- Never touch the leaked electrolyte. Do not disassemble the battery. In case your skin or eyes are contaminated, immediately flush them with gently flowing clean water and go to a hospital for treatment. Please note that items or tools must not be placed on the lithium iron phosphate battery. This could cause a short circuit, and poses a risk to the user.
- Never allow wires or other metal objects to short-circuit the terminals.
- Do not dismantle the battery.
- Do not submerge the battery in water or allow it to come into contact with water.
- Keep clear of heat sources, flammable or harsh chemicals or vapors while charging a battery.
- A type D, foam or CO2 fire extinguisher is required in case of fire.
- Do not strike, throw the battery. Please note that wires should always be protected from mechanical shocks.
- The charger should have parameters meeting the technical specifications of this battery. In case damaged or charged after discharged below the discharge cut-off voltage, this LiFePO4 battery can release a harmful mixture of gasses such as phosphate.
- The battery must be completely dry before reactivated or reconnected to the charging source and load.
- Or its performance will be adversely affected and it will create a safety hazard.
- Periodically check cables and connections. Replace damaged cables and tighten loose connections. Use only batteries under the same brand with equal voltage in series or parallel. It is recommended to use batteries of the same age and fully charge them before connection in series or parallel. Either up to 4 batteries in parallel or 2 batteries in series is allowed. Combination of series and parallel connections is not allowed.
- NEVER hammer or pedal the battery, or pierce the battery case. Never solder battery terminals.

BATTERY MAINTENANCE & STORAGE

- Regularly inspections are required to make sure that its terminals are clean, dry and free of corrosion. Disconnect your battery from charging load or source before cleaning the top of your battery with a damp cloth or non-metallic brush. Make sure your battery is COMPLETELY dry before reactivating.
- Store your battery in a well ventilated and dry area in temperatures between -10°C ~45°C.
- Avoid mechanical shocks or extreme pressure.
- Give your battery a full charge prior to use when it is taken out of storage.
- Charge your battery at least once every 3 months to prevent over-discharge.
- Remember to disconnect your battery from equipment to eliminate any potential parasitic loads that may discharge it. .

PARAMETERS

Model	DC-LFP-BLK-100	DC-LFP-BLK-135	DC-LFP-BLK-20
Nominal Capacity	100Ah	135Ah	20Ah
Energy	1280Wh	1728Wh	256Wh
Round-Trip Energy Efficiency:	≥92%		
Nominal Voltage	12.8V		
Recommended Charge Voltage	14.6V±0.2V		
Standard Charge Current	50A	60A	7.5A
Max. Charge Current	80A	100A	15A
Standard Discharge Current	50A	60A	7.5A
Max. Continuous Discharge Current	80A	100A	15A
Max. Discharge Current(≤5S)	160A	200A	30A
Max. Modules in Series/Parallel	2S/4P		
Standard Operation Temperature	-10~60°C		
Charge Temperature	0~45°C		
Storage Temperature	-10~45°C		

TROUBLESHOOTING

If any problems occur during battery operation, please refer to the following instructions or contact us for professional help.

PROBLEM	SUGGESTED SOLUTION
Overcharge	Disconnect your battery from charging, and allow it to recover.
Over-current /short circuit protection	Disconnect your battery, if it recovers abnormally, please use LiFePO4 battery charger to activate it.
Over-discharge	Built-in BMS will automatically cut off its output, and in this circumstance, you are recommended to use LiFePO4 battery charger to activate your battery.
Temperature beyond normal ranges	Built-in BMS will automatically disconnect the battery from the load, and allow it to cool down or warm up to room temperatures. If your battery recovers abnormally, please use LiFePO4 battery charger to activate it.

Note: It is highly likely that your battery is damaged if it cannot be activated by the charger.



Full 24 month warranty from date of purchase against all defective workmanship and materials.

CONDITIONS:

The user must select a battery of the correct size, design, and capacity for the intended application. Or it will make the warranty void.

If the batteries are paired with an unsuitable charger, which is not included in the package, or the batteries are charged in an incorrect manner, it will invalidate the warranty.

Recommendations for series and parallel installations must be followed. The user or reseller should contact applications engineering for guidance. Or the warranty shall be void.

The batteries must be installed by a certified technician in accordance with proven acceptable practices. Or the warranty shall be void.

Contact dealer and get written consent to dismantle and move batteries to a different location. Or the warranty shall be void.

The warranty does not cover damages due to fire, freezing, misuse, abuse, neglect, physical damage or any act of nature.

Comply with operating instructions, and repair with original parts with authorization. Or the warranty shall be void.

This warranty is not transferable and applies only to original purchasers.

CLAIMS:

Contact the original point of purchase for instructions.

Request authorization before return, or it will not be credited.

Before return, the batteries must be properly packed with enough padding in cartons in case of damage in transit.

DC MONT has the option to provide a refund or replace products for proven defects.

The warranty does not cover indirect, accidental or consequential damages caused by the sale or the use of this product, or personal injury and property damage resulting from the use, maintenance, transportation or installation of the product. Our liability shall be no more than the purchase price of the battery.

The limited warranty is the only one that applies to this unit, and it sets forth all the responsibilities of DC MONT. The warranty described above are exclusive and in lieu of all other warranties, remedies, and conditions, whether oral, written, express, statutory or implied. Manufacturer's exclusive liability for breach of any warranty on the battery shall be to replace the battery in accordance with this limited warranty. This warranty does not cover loss or damages of any other kind, whether direct, incidental, consequential including lost profits, exemplary, special or otherwise, including any lost profits or removal, shipping, or installation expenses.