

LiFePO4 48V Battery Special Warranty Terms

1. Battery Components and Warranty Period

- **Cell Warranty:** 15-year warranty. If the cells fail due to manufacturing defects during the warranty period, Sunnysolar will repair or replace them.
- **BMS Warranty:** 5-year warranty. If the BMS fails during the warranty period, Sunnysolar will repair or replace it.

2. Usage Conditions and Limitations

- **Battery Installation Requirements:** The battery must be installed according to proper low and high voltage electrical standards to ensure compliance with relevant electrical regulations. The selected battery capacity must be suitable for the intended use.

This LiFePO4 battery model does not support series connections and allows up to 10 batteries to be connected in parallel.

- **Charging Requirements:** This LiFePO4 battery requires a dedicated lithium battery charger. Whether it's an AC charger or a solar charger, the maximum charging voltage must be between 56.8V and 58.4V. The battery must be charged once a month when in standby mode, with a charging voltage of 54.4V. If the charging conditions do not meet these requirements, the warranty will be void.
- **Inverter Requirements:** Full warranty applies only to true sine wave inverters. If the battery is used with a modified sine wave or square wave inverter, the warranty period will be reduced to 1 year.
- **Solar Charging Requirements:** If the battery's main charging source is solar panels (PV), the output must be sufficient to fully charge the battery on average every day during both summer and winter. If this condition is not met, the warranty period will be reduced to 1 year.
- **Discharge Depth and Charging:** The normal discharge depth of the battery during use should be maintained around 80% (for example, a 100Ah battery's average discharge depth is 80Ah). The battery voltage should always remain above 51.2V, and it must be charged during the cycling process.

3. Outdoor Use and Environmental Requirements

- **Temperature Limits:** The operating temperature range of the lithium battery varies based on usage: **Discharge Temperature:** -20°C to 60°C/**Charge Temperature:** 0°C to 45°C.

If the battery is exposed to extreme temperatures (either high or low), it may damage the internal chemical components and affect its lifespan and performance.

- **Humidity and Moisture Protection:** High humidity environments may cause the battery to short-circuit or corrode, affecting its lifespan. The battery should not be exposed to humid environments or direct contact with rain.
- **Sunlight Exposure:** Prolonged exposure to direct sunlight, especially in hot weather, may cause the battery to overheat, affecting its performance and safety. The battery should not be exposed to sunlight for long periods.
- **Physical Damage:** If the battery encounters physical damage (such as impacts) outdoors, it may lead to short-circuiting, fire, or explosion, posing safety hazards. When used outdoors, it is recommended to use batteries designed for outdoor environments and take appropriate protective measures, such as waterproof, sunproof enclosures, to avoid the impact of extreme weather.

4. Warranty Responsibility and Limitations

- **Limitation of Liability:** Sunnytech Solar will not be liable for damages caused by improper use, water ingress, mechanical damage, incorrect charging, or failure to meet usage requirements.
- **Additional Fees:** The warranty only covers the battery itself and does not include any additional fees for installation, disassembly, transportation, etc.
- **Improper Use:** If damage occurs due to non-compliance with usage conditions or improper use, Sunnytech Solar will not be liable and will not cover any indirect or incidental damages. The total liability or warranty responsibility will be limited to the original purchase price of the battery, excluding installation or disassembly costs.
- **Exemption from Indirect Damages:** No responsibility will be assumed for any indirect damages caused by any reason, and no further or other warranties will be implied or granted.

5. Commercial Use Restrictions and Warranty

- **Definition of Commercial Use:** Commercial use refers to the battery being used for any form of commercial activity, including but not limited to: business operations, commercial facilities, rental equipment, profit-making activities, etc. If the battery is used for the above purposes, the warranty period will be limited to 90 days and the extended warranty services mentioned above will not apply.
- **Commercial Warranty Terms:** For commercial use requirements, please contact Sunnytech Solar in advance to obtain special commercial warranty terms.

6. Non-transferable Warranty

This warranty is only valid for the original purchaser and is non-transferable to any third party.

7. Warranty Claim and Documentation Requirements

All warranty claims must be accompanied by the original purchase invoice or a valid copy, and the battery must be returned to Sunnytech Solar for repair or replacement. Please contact the after-sales service at service@sunnytech.co.nz as soon as possible within the warranty period.