

CFE-640S / 1280S / 2560S



Instruction manual

CF Energy Co., Ltd.

A world-class manufacturer of lithium-ion power batteries and energy storage systems.

Focus on promoting sustainable environmental protection development commitments, and make active efforts and contributions to achieve carbon neutrality.

CFE-LFP Battery

Applicable product mode: CFE-640S CFE-1280S CFE-2560S

Thank you for purchasing our product. Please read this manual carefully before using it, and operate it strictly in accordance with the product manual. After reading it, please keep it in a safe place for future reference.



Warning

| About operation



Before using the product, please read the product specification, instruction manual and precautions carefully to understand the use method and application scope of the product.



If the product is used incorrectly, the circuit is connected incorrectly, the input power or the load function parameters do not match the performance parameters marked in the product specification, etc., these phenomena are improper use. The company does not assume any responsibility for damage to the product, load and surrounding connections due to improper use.



During the use of the product, keep it away from heat and high voltage, and prevent children from playing with the battery, and do not hit the battery.



Do not short-circuit the positive and negative poles of the battery, do not disassemble the battery by yourself, and do not leave the battery in a damp place to avoid danger.



Discarded batteries should be handled safely and properly, do not put into fire or water.



The battery pack should be stored at ambient temperature and should be charged to a capacity of 40%~60%. To prevent overdischarge of the battery, please charge it every 3 months.



The battery pack should be used under specified conditions, and battery performance over one year of storage is not guaranteed.



The battery must meet relevant regulations during transportation, such as packaging, documentation, and labeling requirements.

The battery pack is used in series:

- ✓ Cannot be used in mixed batches, only in series with the same batch.
- ✓ The difference between the total module voltages should $\leq 100\text{mV}$ when the battery modules are in series.
- ✓ The connecting conductors used in the series module should be as thick and conductive as possible, the contact surface at the series should be large, contact looseness and other phenomena should not occur, and the series resistance between the modules should be reduced as much as possible.
- ✓ Maximum 4 battery modules in series.

Warranty of CFE-640S/1280S/2560S

This warranty specified below applies to CFE LFP battery to consumer through authorized reseller or CFE. The accessories and tool kits provided are not included. If the unit suffers major failure you will be provided with a replacement unit and your warranty will be transferred to the new unit. The units must only be used with controllers or equipment which is explicitly deemed compatible by CFE. In order to supply a high quality service, you should make sure the unit remains connected with Internet so that it can be remotely checked.

1. Purpose

The purpose of this warranty is to define the matters related to warranty policy of products.

2. Warranty Condition

2.1 Warranty Period

The products warranty period is five (5) years from the sales date as mentioned in the Seller's invoice to the End User("Invoice Date") or 3500 cycles 80% DOD ^[1] whichever comes first.

This Warranty period covers a capacity equivalent to 1 cycle per day.

Cycle: Discharge the nominal capacity of a charged battery and charge it afterwards.

Regarding Self-discharging degradation, 180 days after ex-work is ensured.

In the case of non-artificial damage to the housing, display screen, handles and power terminals, CFE shall replace them for free within one year.

2.2 Limitation of Warranty scope

Under this Warranty, CFE is responsible for either battery replacement or battery repair. The Period of Performance Guarantee will continue on any repaired unit. In the event of a replacement units then the Period of Performance guarantee will transfer to the replacement unit.

In no event will CFE be liable for any consequential, incidental or punitive damages (including without limitation of loss of profit, harm to goodwill or business reputation, or delay damages) arising from or out of the Product or its installation, use, performance or non-performance, or any defect or breach of warranty, whether based on contract, warranty, negligence, strict liability, or any other theory. CFE's aggregate liabilities, if any, in damages or otherwise, shall not exceed the purchase price paid by the Original Buyer for the product.

2.3 Exclusions of Warranty

Damage or impairment to the Products resulting from any of following activities are NOT covered by this Warranty:

Installation or use with any devices not approved as compatible by CFE.

Failure to install or use the battery in the way intended, or as demonstrated in the installation manual including incorrect-installation of cables and connections.

[1] Test conditions: 0.2C Charging/Discharging, @25°C, 80% DOD

Failure caused by charger or inverter unit.

Incorrect transportation, storage, installation or wiring by consumer or installer; if buyer fails to use the original packing materials provided by seller during the transportation of equipment the products damage or failure shall not fall under the warranty scope of the product.

Mistreatment of the product including incorrect installation environment, incorrect temperatures or using the units other than in the specified manner.

Damage caused by any impact, physical trauma to the unit such as dropping or mishandling.

Attempts to change the functionality of the unit in any way.

Exposure of the Product to movement or shaking following installation, or temperatures of more than 50°C or below -10°C;

Using the battery outside of the clearly stated performance criteria for the unit.

Water ingress, corrosive gas damage or installation in dirty environments causing particles to affect performance.

Anyone other than those authorized by CFE may not modify, disassemble, repair or replace the product;

The unit must have clearly identifiable and authentic serial number and labels on the unit.

Products suffered any external influences including unusual physical force, electrical stress (power failure surges, inrush current, lightning, flood, fire, accidental breakage, etc)

Extensive superficial damage to the case demonstrating impact or mishandling or poor protection of the battery.

Product damage and defect caused by deliberately or willful act.

Products failure is not reported to seller or CFE authorized service partner within 1 week of appearance.

The Product not being operated for any period of 6 months or more.

Unusual physical or electrical stress caused by **Force majeure**, such as power failure surges, inrush current, lightning, flood, fire, accidental breakage, etc.;

3. Performance Warranty

CFE guarantees that CFE-LFP battery will retain greater than or equal to 70% of output energy capacity for 5 years from the Invoice date and follow the specification and the user manual provided by CFE.

Capacity measurement condition (referenced IEC: 62619)

Ambient temperature: 25 ± 2°C

Total energy/Usable energy measured under specific conditions from CFE 0.2CC-CV at DC side.

If you suspect CFE's verification, the Product must be tested by an EU certified origination or a certified 3rd party testing company. Meanwhile, the cost of any 3rd

party evaluation service charge should be beard by yourself, unless your claim is proven to be valid, in which case CFE will be responsible for the testing costs.

4. Warranty Policy

If on arrival the product is not of acceptable quality the customer is entitled to have the goods repaired or replaced.

5. About Service Products/Parts

Service product or accessory could be used as new or refurbished condition and CFE guaranteed which performance is equal to or higher than replaced device.

If the product is no longer sold in the market, CFE would replace it with different kind of product with equal or higher functions and performances, or the residual annual depreciation value of the buyer paid price within the time limit for performance guarantee.

6. Claim Policy

Whether to repair or replace the product will be determined by CFE in its sole discretion.

Claims under this warranty must be made from authorized distributor whom the product was purchased. Meanwhile, you must notify your distributor or CFE of a claim by:

- Give a call or E-mail to your distributor;
- Contact with CFE hotline or Email us directly.

within 48 hours of a faulty discovered.

The following items must be included:

The original purchase receipt or equal valid document;

Description of the alleged defect(s) to your distributor or CFE after service hot line or send email to CFE;

The product's serial number and the initial installation date.

If you suspect the battery to be faulty, the unit should be returned to appointed distributor at the cost of the customer at approved costs. Having been checked by designated expert, if the unit is deemed faulty, we will dispatch a REPLACEMENT or FIXED unit and would credit the cost of returning the unit to us for testing (based on standard acceptable logistical costs).

7. Out Of Warranty

In the event the Product is out of warranty, CFE may (in its discretion) provide certain after-sales service to Original Buyer, but all the costs and expenses, such as parts, labour costs and travel expenses, shall be borne by Original Buyer. To request such after-sales service Original Buyer must provide sufficient information about any defects, to enable CFE Partner to determine whether such defects are capable of repair.