

# **YOLIQUE**

**BATTERY**  
**YOUR POWER EXPERT**



# **12V 100AH**

## **LITHIUM BATTERY (LIFEPO4) USER MANUAL**

Thank you for choosing our product! For safety information and product specification, please read this manual carefully before use.



# Product Introduction



The products is a 12V 100Ah LiFePO<sub>4</sub> Lithium Battery, which can be used for low-voltage electrical power supply for home energy storage, Backup power, fishing boats, RV, golf carts .YOLIQUE 12V 100Ah lithium battery has a BMS system.



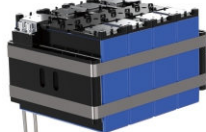
## BMS Protection System

Provides reliable battery control and safety protection.



## Brand New A Cell

Brand new A cell, modular supply more secure, deeper discharge, durable.



## Polymer Heating Film

Adopt new polymer PI heating film, heating speed is fast, heat evenly.

## Polymer Flame-Retardant Shell

High and low temperature resistance, water proof, fire proof, flame proof, explosion proof. It can easily cope with the impact of various complex weather on the battery.



# Packing List

**YOLIQUE 12V 100Ah LiFePO<sub>4</sub> Lithium Battery \*1**

**Terminal Bolt \*2**

**User Manual \*1**



Terminal Bolt



YOLIQUE 12V 100Ah LiFePO<sub>4</sub> Lithium Battery

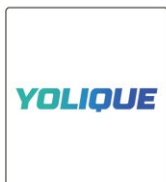


User manual

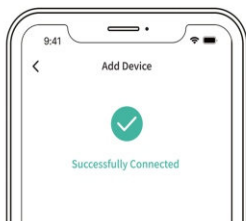
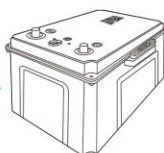
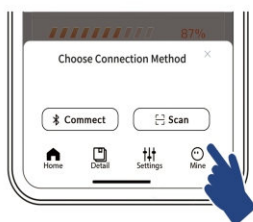
# MONITORING VIA YOLIQUE APP

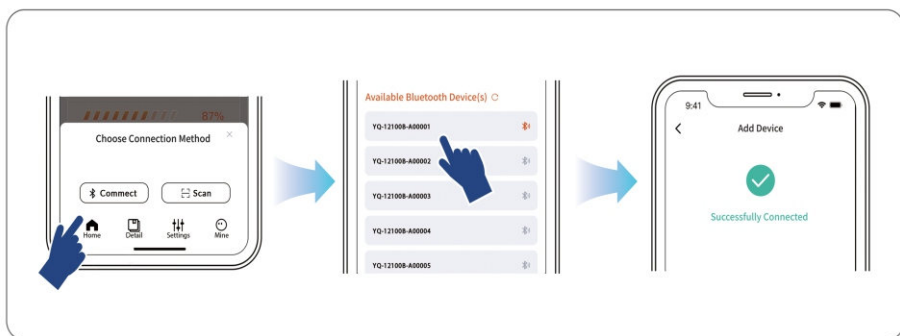
YOLIQUE 12V 100Ah Smart TM LiFePO4 battery, integrated with Bluetooth 5.0, enables accurate and effortless real-time tracking and management of the battery status.

- Download the YOLIQUE APP and register your account.**  
**Warm reminder:**  
**The APP can be downloaded by scanning the QR code below. You can also download the App by searching for "YOLIQUE" in the App Store or Google Play.**



- Pair the battery with the YOLIQUE APP and effortlessly keep track of the battery's real-time status.**





## FCC STATEMENT

**This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:**

**This device may not cause harmful interference.**

**This device must accept any interference received, including interference that may cause undesired operation.**

**This device has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This device generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this device does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:**

**Orient or relocate the receiving antenna.**

**Increase the separation between the equipment and receiver.**

**Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.**

**Consult the dealer or an experienced radio/TV technician for help.**

**RF Exposure Information:** This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator and your body.

**Caution:** Any changes or modifications to this device not explicitly approved by manufacturer could void your authority to operate this equipment.

# Caution Before Use

Thank you for purchasing YOLIQUE lithium battery! Please read this product manual and save for future reference, Contact us at [YOLIQUE@eureka-power.com](mailto:YOLIQUE@eureka-power.com) to activate the five years warranty.

**There are three items in the package .  
Please check to make sure there is no missing parts.**

1 Terminal Bolts



2 LiFePO4 Lithium Battery



3 User Manual



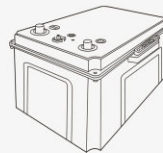
**Insulating Gloves**



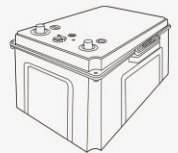
**After unpacking the box, wear insulating gloves for battery installation and wiring.**

**Due transportation safety required the battery is not fully charged .**

**Less than 100%**

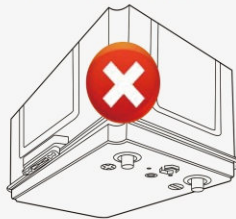
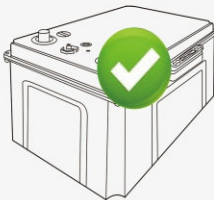


**100%**



**Please fully charge the battery before first use.**

**Install the battery upright with terminal bolt facing up. If you have any other installation requirements, please contact [YOLIQUE@eureka-power.com](mailto:YOLIQUE@eureka-power.com).**

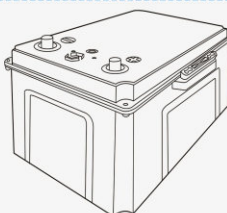


**Yolique batteries can be used at temperatures from -30 to +60 °C. It can be stored for a long time at a temperature of 10~35 °C. It is best to store the battery at 80% charge, and for better long-term storage, it is best to charge it every three months.**

**storage**

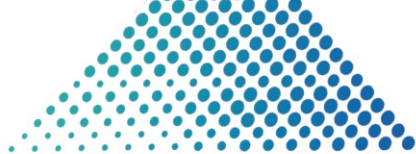


**10°C ~ 35°C  
50°F ~ 95°F**



**Recharge Every 3 Months**





# CATALOGUE

Technical Parameter 01

Usage Scenario 02

Battery First Use Method 03

Parallel Connection 05

Operation Precautions 07

Trouble Shooting 08

Recommended Cable Size 09

Important Safety Guidelines 10

Warning 11

## Technical Parameter

Nominal Voltage	12.8V
Rated Capacity	100Ah
Energy	1280Wh
Internal Resistance	$\leq 2.8\text{m}\Omega$
Cycle Life	4500 times (77°F、0.2C、100%DOD)
Charge Method	CC/CV
Charge Voltage	14.4 $\pm$ 0.2V
Maximum Charging Voltage	16V
Maximum Continuous Discharge Voltage	100A
Maximum Continuous Charging Voltage	100A
Operating Temperature Range	-4°F~+140°F (-20°C~+60°C)
Operating Voltage Range	10~14.6V
Battery Size	L:330mm(12.99") W:243mm(9.56") H:225mm(8.85")
Weight	11.5 $\pm$ 1KG(25.35 $\pm$ 2LB)
Single Voltage Sampling	1mV
Current Sampling	0.1A
Temperature Sampling	1°F
SOC	1%
Charging Temperature	32°F~+131°F (0°C~+55°C)
Discharge Temperature	-4°F~+140°F (-20°C~+60°C)
Storage Temperature	-40°F~+140°F (-40°C~+60°C)



## Usage Scenario

### YOLIQUE 12V 100AH LITHIUM BATTERY APPLICATION SCENARIO



**RV/Camping**



**Fishing Boat**



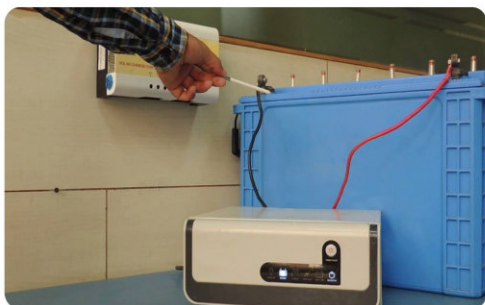
**Home Energy System**



**Golf Cart**



**Portable Energy Storage Devices**



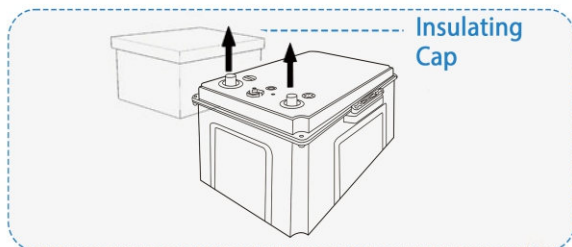
**Backup Power**

### OTHER APPLICATIONS

Truck Air Conditioning Unit, Truck refrigerator, off-grid solar systems, Backup power supply, Portable mobile energy storage.

# Battery First Use Method

1. Wear insulating gloves before connecting.

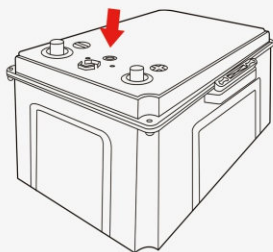


## 2. Preparatory Work

Open the packing case to ensure that accessories and batteries are intact. Then remove the battery and pull out insulating cap.

## 3. Battery Activation

Tap the activation button once to turn on the power, wait 5 seconds, and then tap the activation button twice to activate the battery.



Power on: Tap once

Activate: Tap twice

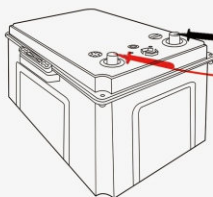
Heating: Tap three times

Turn off: Long press more than 5s

YOLIQUE 12V 100Ah lithium battery itself has a BMS system, Battery idle for 48 hours will trigger the battery self-protection function. It will power off automatically and need to be powered on again and activated.

## 4. Measuring Voltage

After activating the battery, two ways to check the voltage: 1. Open yolique APP to check the voltage; 2. Measure the voltage with a multimeter. If the stigma voltage is  $> 12V$ , the battery can be used normally; if capital voltage  $< 12V$ , please contact us at [YOLIQUE@eureka-power.com](mailto:YOLIQUE@eureka-power.com).



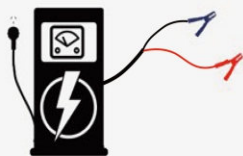
Multimeter



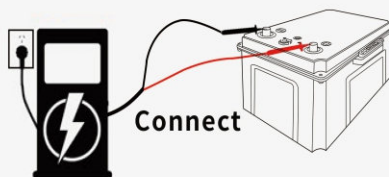
## 5. Charge The Battery

Open the charger, adjust the charging voltage of the charger to 14.5V. Connect the charger and the battery, and charge the battery.

The voltage is set to 14.5V



Recharger



Connect

Battery Charger

Observe the charging current, if the current is greater than 0.5A, it means that the charging is normal. During the charging process, the current will gradually decrease. If the charging current is 0, it means that the battery is full.

>0.5A is normal 0A indicates that it is full



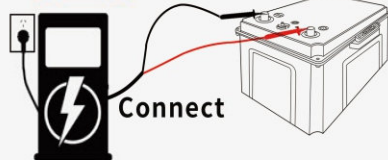
Charge to 100%



Charging Current



Charging Current



Connect

Battery charger

Suggestion charging current.

The 20A (0.2C) battery will charge to 100% in about 5 hours.

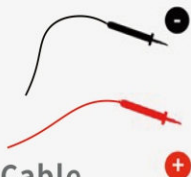
The 50A (0.5C) battery will charge to 100% in about 2 hours.

### Tips:

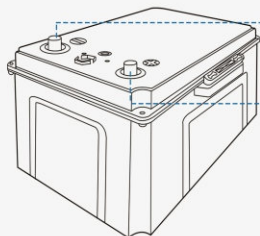
When connecting to the grid, connect the charger to the battery first to avoid sparks.

## 6. Check the positive and negative terminals of the cable before connecting the appliance.

Positive and negative connections can damage batteries and other electrical devices. Ensure that the positive end of the cable is connected to the positive end of the battery, and the negative end of the cable is connected to the negative end of the battery.



Electrical Cable



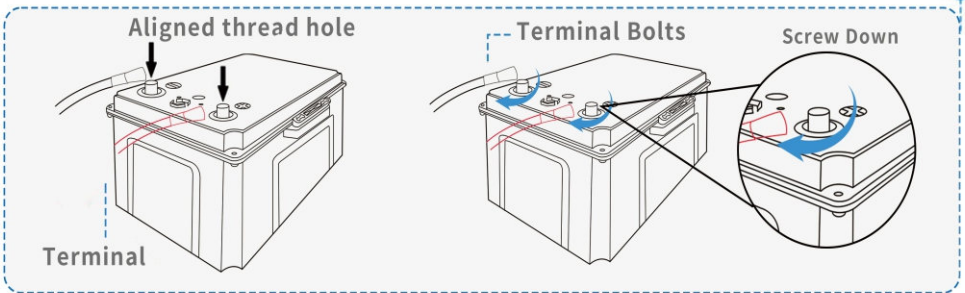
Negative Pole

Positive Pole



## 7.Connecting Appliance

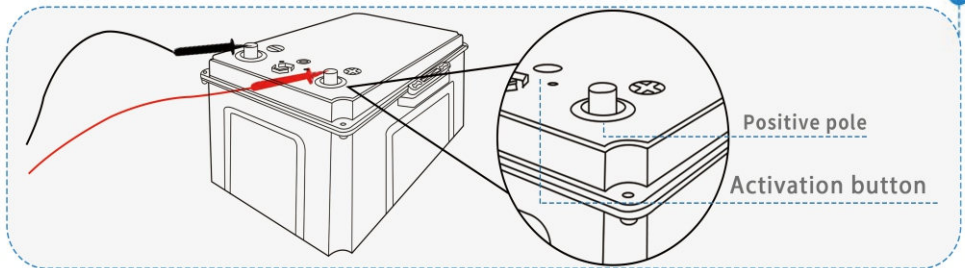
Take out the terminal bolt, align the electrical terminal with the battery thread hole, and then tighten the column bolt (Note: if the battery has been activated.the electrical power is large, there may be a slight spark, which is a normal ).Ensure that the column bolts are tightly secured, Loose electrical terminals may cause the pole to heat up, which may damage the battery.



## 8.After making sure that the electrical appliance is properly connected to the battery.

Activate the battery if it has not been used for more than 48 hours.

Tap the activation button once to turn on the power, wait 5 seconds, and then tap the activation button twice to activate the battery.



## Parallel Connection

In order to increase the service time of the appliance, the battery can be used in parallel. (It is not recommended that the power used after the parallel connection is greater than the output power of a single battery. Otherwise, the risk of battery damage is increased).

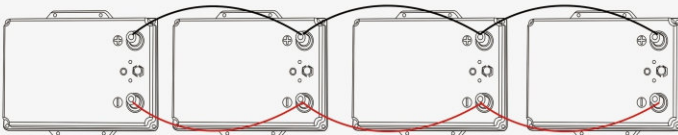
### Connection Premise

From the same brand (because different brands have their own special BMS).

Purchased in near time (within one month).It has the same battery capacity and the same voltage (the voltage difference before shunt is within 0.5V).

A maximum of four 100Ah battery systems can be connected in parallel.

**Tips: Do not use high current loads for long periods of time**



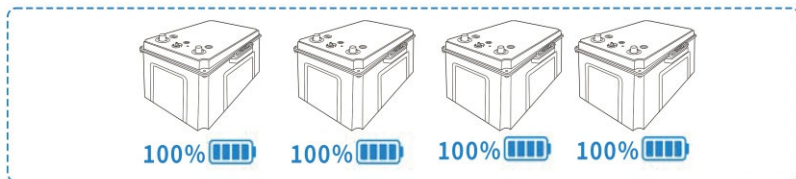
# HOW TO CONNECT BATTERIES

**Wear insulating gloves for protection before connecting! Please pay attention to operation safety in the process of connection!**

## Step1 Voltage Balancing Before connection

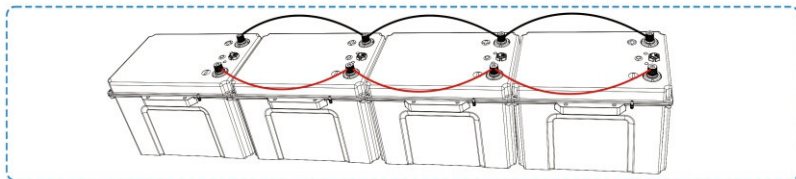
**Below two steps are necessary to reduce the voltage difference between batteries and let the battery system perform the best of it in inparallel.**

### 1.Fully charge the batteries separately.



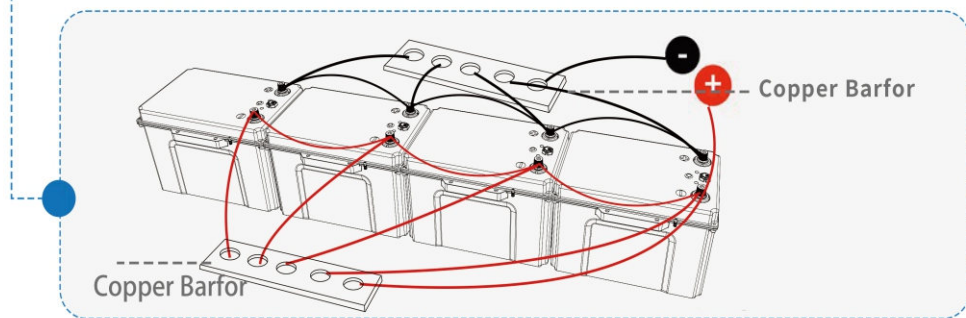
### 2.Connect all of the batteries in parallel, and leave them together for more than 2hrs.

**When connected in parallel, the capacity of the battery system will increase by a corresponding multiple according to the number of batteries you connect. For example, if n 12V 100Ah batteries are connected in parallel, the battery system will be  $(100 \times n)$  Ah.**



## Step2 TotalInput & Output connection

**Use two copper bars (instead of battery terminals) to connect all the positive and negative output/input cables, ensuring that the input & output currents of each battery are balanced. As the connected terminals may heat up or even melt if the total output/input current of the battery system is too high.**

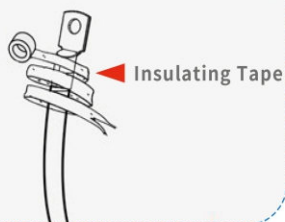
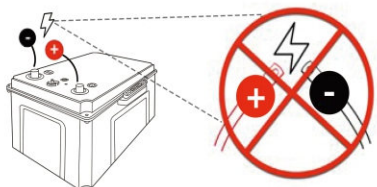


## Step3 Rebalance Every 6 Months

**If you are connecting multiple batteries into one battery system, it is recommended that you follow Step 2 to rebalance the battery voltage every 6 months, as there may be a voltage difference after 6 months of battery system operation.**

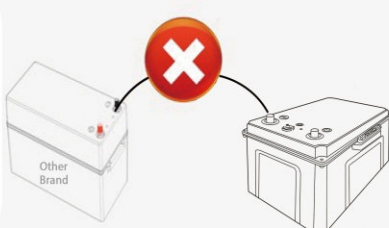
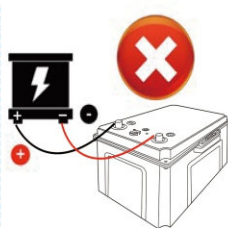
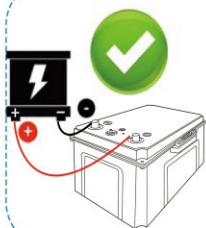
# Operation Precautions

Avoid direct contact between the terminals of the positive and negative wires connected to the YOLIQUE battery, which may cause the battery to short-circuit and become unusable.



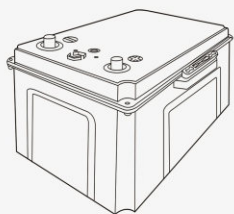
We recommend wrapping the terminals with insulating tape during wiring.

Make sure the battery is properly connected to the charger and do not reverse the positive and negative connections.



Do not connect batteries of different brands or specifications in series or parallel.

Before connecting the appliance, ensure that the power supported by the battery can meet the power requirements of the appliance. (if you are not sure, please contact [YOLIQUE@eureka-power.com](mailto:YOLIQUE@eureka-power.com) for further assistance.)



Supported Power



50W



100W



800W



1000W



1200W



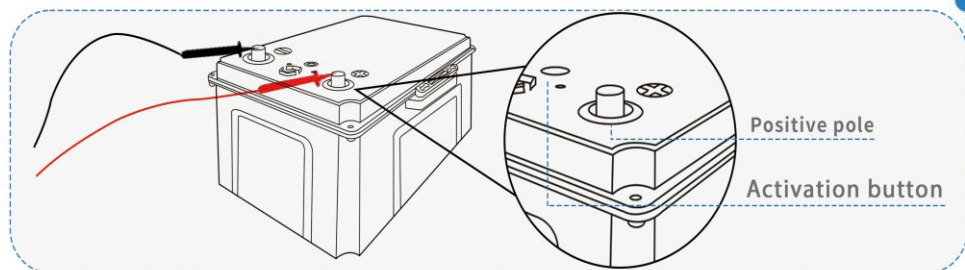
1200W



# Trouble Shooting

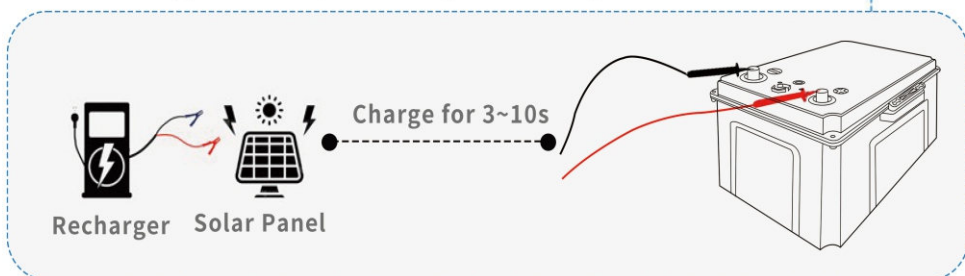
## 1. Battery activation method Method 1: Regular Activation

Tap the activation button once to turn on the power, wait 5 seconds, and then tap the activation button twice to activate the battery.



## Method 2: Charge Activation

Connect to a supported charger or solar panel to charge it.



## 2. Battery heating and insulation policy

When charging at low temperature, the heating will be turned on automatically, if the temperature is too low during normal use, please turn on the heating manually on the app side.

## 3. The battery can't be charged

If the battery cannot be charged, you can activate the battery first and then charge it. If you still cannot charge after 3 consecutive activations (Each activation requires a 10-minute interval), please contact us at [YOLIQUE@eureka-power.com](mailto:YOLIQUE@eureka-power.com) to help solve the problem.

## 4. The battery can't discharge

If the battery does not discharge, try to charge the battery for 20 minutes before discharging. If it can be discharged, it proves that the power is insufficient and needs to be used after the battery is full, if the battery does not charge, please open YOLIQUE App to view the trouble tips, if it still does not discharge after charging, please contact us at [YOLIQUE@eureka-power.com](mailto:YOLIQUE@eureka-power.com) to help resolve the problem.

## Recommended Cable Size

Battery cables should be properly sized to handle the expected load. Refer to the table below for amperage ratings for different sizes of copper cables.

PVC COPPER CABLE SIZE (AWG/mm <sup>3</sup> )	AMPACITY(A)
14(2.08)	20
12(3.31)	25
10(5.25)	35
8(8.36)	50
6(13.3)	65
4(21.1)	85
2(33.6)	115
1(42.4)	130
1/0(53.5)	150
2/0(67.4)	175
4/0(107)	230

The above values are from NEC Table 310.15(B)16 for copper cables rated at 167°F(75°C) operating at an ambient temperature not exceeding 86°F(30°C). Cables longer than 6 feet (1829 mm) or ambient temperature higher than 86°F (30°C) may require heavier gauges to avoid excessive voltage drops with undersized ones.

## Important Safety Guidelines

- 1.DO NOT open, dismantle, or modify the battery.**
- 2.Please keep the battery away from heat sources, sparks, flames, and hazardous chemicals.**
- 3.Place the battery in a place with good ventilation and heat dissipation to prevent overheating and damage to the battery.**
- 4.Size the battery cables and connectors appropriately. Make sure to keep identical cable lengths. Avoid accidents caused by unsuitable connectors or cables that make the connection a heat source during battery operation.**
- 5.Please tighten all cable connections,as loose cable connections can cause terminal meltdown or fire.**
- 6.DO NOT puncture, drop, crush, burn, penetrate, shake, or strike the battery. The battery should be securely fastened during handling to prevent impact or dropping. Place the battery on a flat area to avoid tilting or slipping.**
- 7.Do not press heavy objects on the battery for a long time; otherwise, internal short circuit may occur.**
- 8.DO NOT immerse the battery in water whether the battery is in use or on standby.**
- 9.DO NOT touch the exposed electrolyte or powder if the battery casing is damaged. Once uncovered electrolyte or powder that has contacted the skin or eyes MUST be flushed out with plenty of clean water immediately. Seek medical attention afterward.**
- 10.Reverse polarity can damage batteries and other electrical devices. Ensure that the positive end of the cable is connected to the positive end of the battery, and the negative end of the cable is connected to the negative end of the battery.**

**11.Avoid exposed metal terminals or connectors. DO NOT place tools on the terminals or touch them with bare hands; DO NOT short circuit or use outside of specified electrical ratings.**

**12.DO NOT dispose of the battery as household waste. Please use recycling channels in accordance with local, state, and federal regulations.**

**13.Trained and certified technicians are required for safe and reliable installation. This product manual can only serve as a guideline as it cannot cover all possible scenarios.**

## Warning

- Please wear proper personal protective equipment when working on the battery.
- Battery installation and maintenance must be performed by trained and certified technicians.
- Improper use of the battery can lead to battery failure or other potential damage.
- Improper configuration, installation, or use of related equipment in the battery system may damage the battery and other related equipment.
- Batteries are potentially dangerous and proper precautions must be taken during operation and maintenance.
- Failure to follow the warnings above can result in potential damage.

**If you have any questions or need any help, please feel free to contact us at [YOLIQUE@eureka-power.com](mailto:YOLIQUE@eureka-power.com).**



# ***YOLIQUE***

**SUZHOU YIKA TRADING CO., LTD.**

Email: [YOLIQUE@eureka-power.com](mailto:YOLIQUE@eureka-power.com)

Address: No. 807-3, Room 801, Building 3, 268 Huichang Road,  
High-tech Zone, Suzhou

