



# LITHIUM BATTERY

Ion-NMC, Phosphate-LFP



## About Us :

LETHEX is a battery manufacturing company with a unique concept in the world.

**“ The First Insulated Battery Made by Our Company in the World ”**

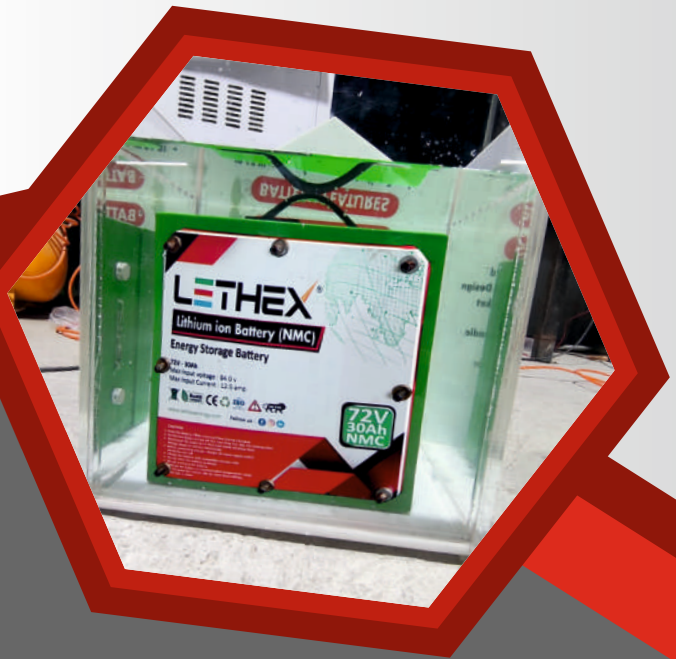
We as a reliable Indian Lithium battery(LFP, NMC) manufacturer and turnkey battery pack solution provider, focuses on the design, development, production & sales of lithium battery packs, serving diversified markets such as Electric Vehicles, OEM, Solar, UPS, material handling equipments, Agriculture Sprayer and industrial cleaning applications.

### Lethex Is A Brand Trusted By People

Our Lithium battery product solutions reflect genuinity in the longer run, utilized in the range of EV mobility and stationary applications which are:

- ▶ Environmental Friendly
- ▶ Diverse Utilisation
- ▶ Supreme Performance
- ▶ Advanced Battery Precision

Let's Drive the Future



### Battery Key Features :

- ▶ Unique battery design
- ▶ Fire Proof
- ▶ IP - 67 Water Proof
- ▶ Discharging Socket
- ▶ Short circuit Protection Board
- ▶ Shock proof Electric Insulator

Design : Simple plug & play installation modular design

Technology : Proprietary & Superior BMS Remote Monitoring System

Performance : Provides greater mileage Enhanced fast charging

System : CAN, Blue tooth, etc.

### Product Applications :

- ▶ E-Scooter
- ▶ Bicycle/Bike
- ▶ Inverters
- ▶ Energy Storage System
- ▶ E-Tractor
- ▶ Telecom UPS
- ▶ E-Rickshaw
- ▶ Solar
- ▶ Agriculture Spray Pump

# Company Culture

## Corporation Vision

- Dedicate to creating the most valuable life stage for employees and supplying the most competitive battery products for customers.

## Corporation Mission

- Providing superb quality and efficient battery and energy solutions to create value for customers.

### Sincerity



Fact-oriented;  
Do what one Says;  
Don't talk big and  
talk empty;  
Put end to cheating

### Teamwork



Team spirit;  
More collaboration;  
More communication;  
More sharing;  
Help each other

### Development



Training; Veterans help  
the newly-recruited  
person; Target  
multiplied; Conclude  
experience.

### Energetic



Keep happy mood;  
Sense of belonging;  
Hold more activities;  
Create harmonious  
working environment.

LITHIUM  
BATTERY



# Why Choose us



## Experienced Professionals

We pride ourselves on being a professional manufacturer of Lithium-Ion Batteries under 'Make in India'



## Expert Technical Skills

Our Technical experts will get you Long-lasting, reliable and professional products



## Trustworthy

Our Business has been built on trust and total customer satisfaction



## Friendly Service

Our after sales services are within hours, and in most cases same day!



## Excellent Reputation

We have built our reputation on the attention to details and our loyal service to our customers



## Affordable Prices

Our products are at affordable prices within your budget.



# 4 Types Lithium Battery

(Ion-NMC, Phosphate-LFP)

Customised Colour | Unbreakable | Fireproof |  
IP-67 Waterproof | Dust Proof | CAN & Bluetooth



## Li-ion Battery

### Capacity

48 V 25 Ah	60 V 25 Ah	60 V 35 Ah	72 V 35 Ah
48 V 30 Ah	60 V 30 Ah	72 V 30 Ah	

**Product Type** : Li-ion Battery

**Outer Body** : Insulated/Metal

**Life** : up to 6 years / 1500 cycle



## Li-Phosphate Battery

### Capacity

48 V 24 Ah	60 V 24 Ah	60 V 36 Ah	72 V 36 Ah
48 V 30 Ah	60 V 30 Ah	72 V 30 Ah	

**Product Type** : Li-Phosphate Battery

**Outer Body** : Insulated/Metal

**Life** : up to 6 years / 2500 cycle

## Customised Battery

48 V 40 Ah	60 V 35 Ah	60 V 45 Ah	72 V 35 Ah
48 V 35 Ah	60 V 40 Ah	72 V 30 Ah	

72 V 120 Ah | 72 V 150 Ah

Battery Capacity for Different Appliacantions







# Smart Lithium Ion Battery

## (12 V-10ah | 12 V-12ah)

40 times Spray in Single charge

light weight : 0.7kg

### High Energy Density



Store Much more energy compared with lead-acid batteries. Batteries have a deep charge rate providing maximum versatility

### Eco Friendly



Use more abundant and non-toxic materials that can be produced with less energy and easy to recycle

### Powerful

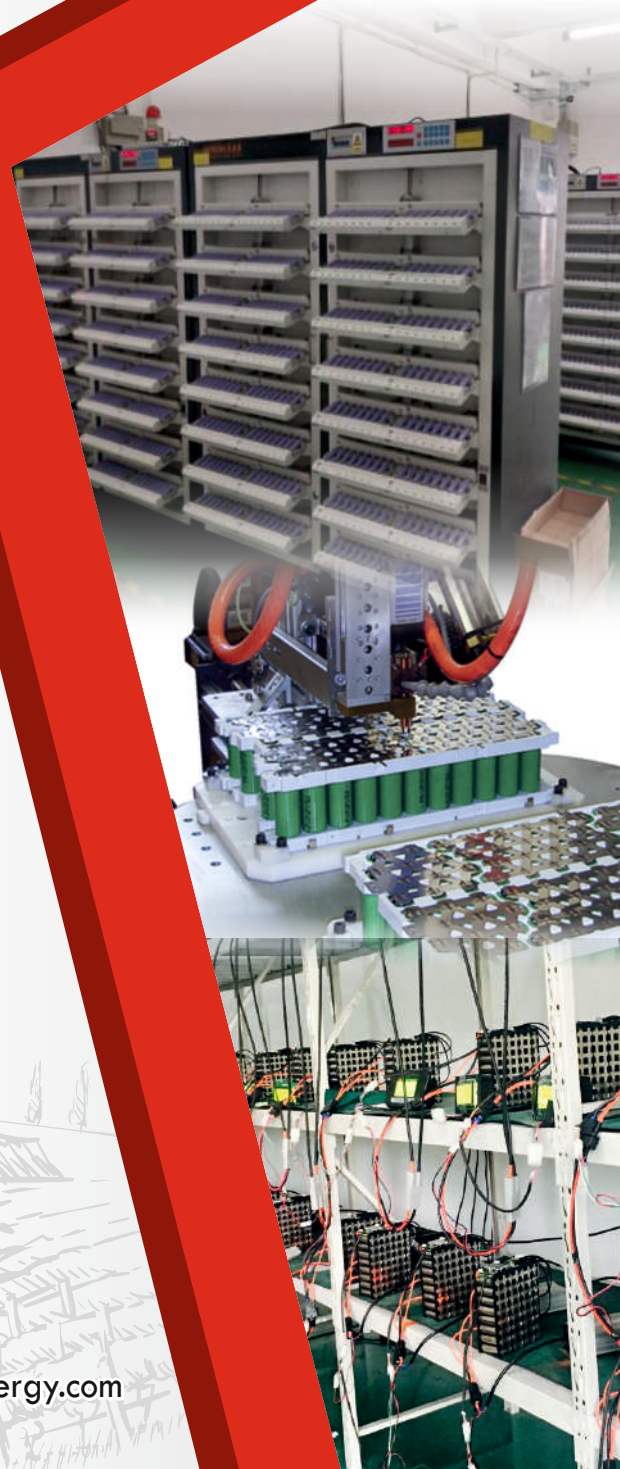


Lethex Lithium-ion battery are nearly 4 times as powerful as SLA and can provide more time of use.

### Long Service Time

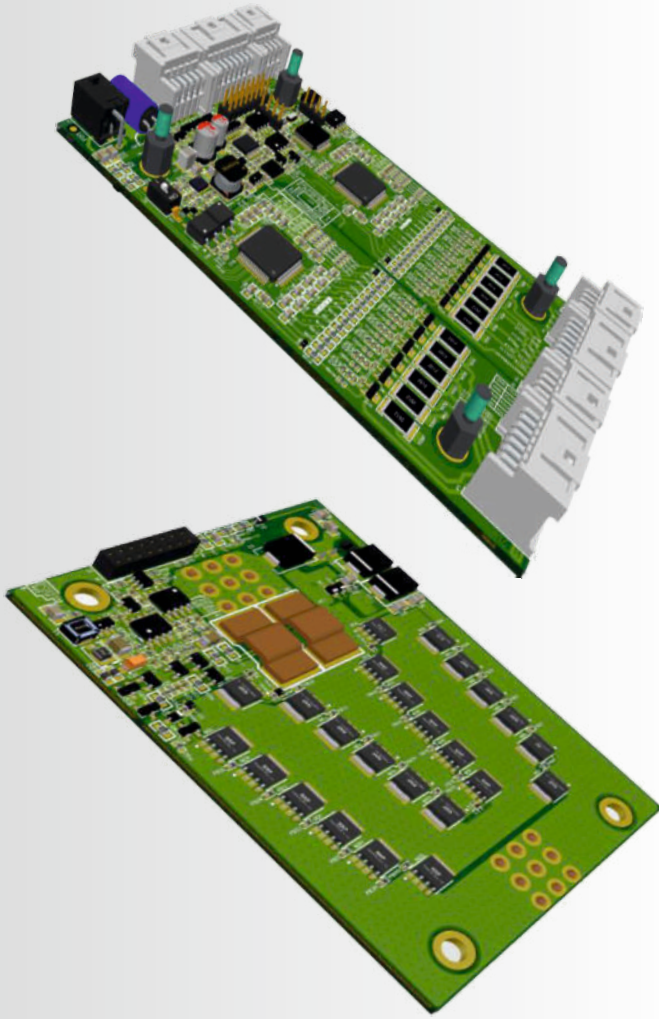


Lethex batteries have a long service life. These batteries will provide you with 1000 complete charge and discharge cycles



# Battery Management System (BMS)

**CAN 2.0, 5.1 Bluetooth**



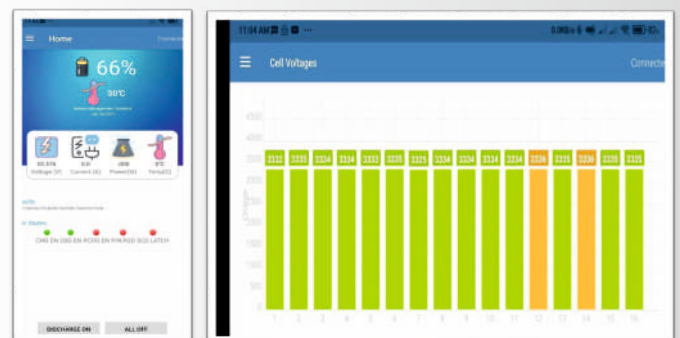
## FEATURES

- ▶ Supports multiple battery chemistries - LFP, NMC
- ▶ Measures Individually 20 cell voltages in series
- ▶ Measures 8 cell temperatures
- ▶ Up to 90V Battery Packs
- ▶ Smart passive balancing algorithm with up to 110mA at 5.0V Cell
- ▶ State of Charge, State of Health, Capacity, Remaining Capacity.
- ▶ Cell over voltage, under voltage, Open wire, Cell over and under temperature hardware interlock layer protection
- ▶ Isolated CAN 2.0, 5.1 Bluetooth
- ▶ Pre-charge Control
- ▶ Current Sensor Monitoring
- ▶ Inbuilt Power Supply for 20S
- ▶ Fault Management
- ▶ Data Logging
- ▶ Ultra-Low Power Dissipation
- ▶ Automotive Grade
- ▶ Status LEDs for error indication and balancing
- ▶ Watchdogs and self-diagnostics safety systems
- ▶ Sleep mode current consumption is less than 50uA
- ▶ Compatible with our Dashboard in real time Offline and Online web portal also with IoT device
- ▶ 1.5 millivolt Accuracy Cell measurement
- ▶ Low impedance PDU Path Drive
- ▶ As per AIS156 Buzzer and LED indication on specific Temperature

## Applications

- ▶ Electric Vehicles (cars, trucks, busses, boats, heavy equipment, racing, etc)
- ▶ Hybrid & Plug-In Hybrid Vehicles
- ▶ Solar and wind energy storage
- ▶ UPS and peak shaving applications
- ▶ Research & Laboratory Testing

## Application



# EV IP-67 Waterproof Charger

## Water proof Multi stage Charger

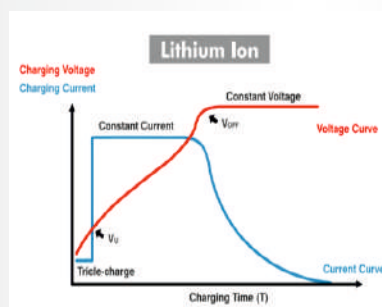
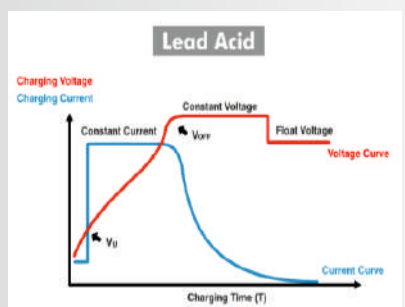


### KEY FEATURES

- ▶ 3 Stage Charging (Trickle, CC, CV) with Equalization and 4 Stage charging (Trickle, CC, CV, Float) with Boost Stage.
- ▶ Micro Controller Based Battery Charger.
- ▶ Wide Input Range.
- ▶ Automatic Mode Selection
- ▶ LED Indication for Charging Status.
- ▶ High Efficiency.
- ▶ OCP, SCP, OVP, OTP, Reverse Battery Protection, Surge 4KV and EMI.
- ▶ CAN Enable (Optional)



### CHARGING PROFILE



### LED INDICATIONS

Stage	LED 01	LED 02
Standby Mode (No Battery Connected)	● ON	● ON
Trickle or 0 to 50% Charging	● Slow Blinking	● ON
50 to 100% Charging	● Slow Blinking	● ON
Battery Full Charge	● ON	● ON
OTP	● ON	● ON
Over Time	● ON	● ON
Error Code	● ON	● ON
Reverse Battery	● ON	● ON

### PROTECTION RESPONSE

#### ▶ OVER CURRENT PROTECTION

When output is over loaded with 110% of rated current, the charger will turn off the output and no components will be damaged. The charger shall retry few seconds and does auto recovery when fault condition is removed.

#### ▶ SHORT CIRCUIT PROTECTION

When output is being shorted, no components will be damaged. The charger will automatically recover when short is removed.

#### ▶ OVER TEMPERATURE PROTECTION

When the internal temperature exceeds the defined limits, the charger does over temperature detection and the output charging current shall be limited. Once the temperature comes down charger will recovery to normal mode.

#### ▶ REVERSE BATTERY PROTECTION

If Battery connections are wrong, the charger will not give output and no components will be damaged

#### ▶ INPUT OVER VOLTAGE PROTECTION

When the input voltage exceeds the defined limits the charger will not give output and no components will be damaged, once the voltage is normal the charger goes to normal mode.



# Battery Features

- ▶ IP-67 Water proof
- ▶ Fire Proof Structure
- ▶ Genuine Capacity
- ▶ Over Voltage & Over
- ▶ Temp. Control board
- ▶ Shok Proof
- ▶ Electric Insutator
- ▶ Short Circuit Protection Board
- ▶ Unique Battery Design
- ▶ Discharging Socket
- ▶ Charging Point
- ▶ Comfortable Handle
- ▶ Eco-Friendly
- ▶ Customized Color
- ▶ CAN, Bluetooth



CAN,  
Bluetooth



Long  
Backup



Low  
Maintenance



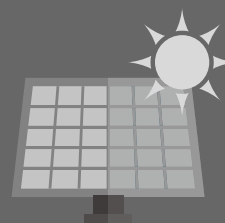
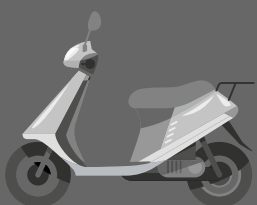
High  
Performance



Fast Charge  
Acceptance

## Product Applications





- ▶ E-Cycle Battery
- ▶ E-Rickshaw Battery
- ▶ Storage Battery
- ▶ E-Scooter Battery
- ▶ E-Tractor
- ▶ Agriculture Spray Pump
- ▶ E-Bike Battery
- ▶ Solar Battery
- ▶ Loader & Heavy Machine



# Energy Storage System

The energy storage system (ESS) containers are based on a modular design. Configured to match the required power and capacity requirements of client's application. The energy storage systems are based on standard sea freight containers starting from kW/kWh (single container) up to MW/MWh.

Item	Specification	
Container Dimension	20ft	40ft
Power Capacity	500KWh~1MWh	2MWh~3MWh
Rated Output Voltage	220V/230V/380V etc.	
Rated Output Frequency	50/60Hz	
Output Phase	3P+N	
Temp Range	-20°C~50°C	
Communication	RS485\CAN	
Temp Control	HVAC+BMS	
Heat Dissipation	Forced air cooling	
Fire Suppression	Heptafluoropropane Fire Extinguishing System	

Type	Product photo	Electric power
10'		0.5-1Mwh
20'		1-1.5Mwh
40'		1.5-2Mwh
45'		2-2.5Mwh





# LITHIUM BATTERY

Ion-NMC, Phosphate-LFP





Certified by :



:: CONTACT US ::

ADDRESS : 87&88, Diwali Baug Park Estate, Sayan, Surat, Gujarat, BHARAT

+91 70463 35047 +91 99133 79871 info@lethexenergy.com

www.lethexenergy.com