



## Product overview



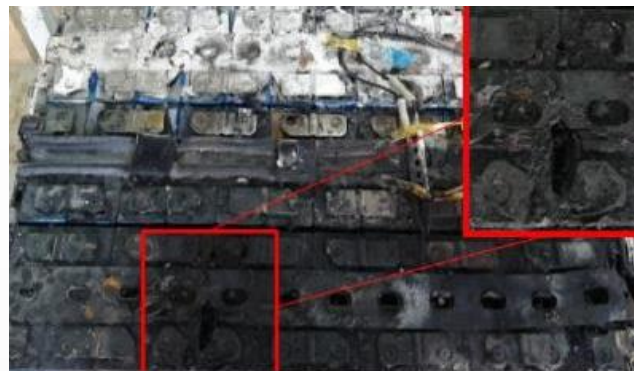
# Nitrogen Fire Protection Device

## Introduction:

Nitrogen protection is applied to the safety protection of lithium-ion batteries to prevent self-ignited fires and fire development, thus improve the safety performance of EV Li-ion batteries during driving, charging operation or simple parking. The device is also widely used in energy storage system and lithium-ion battery based UPS applications.

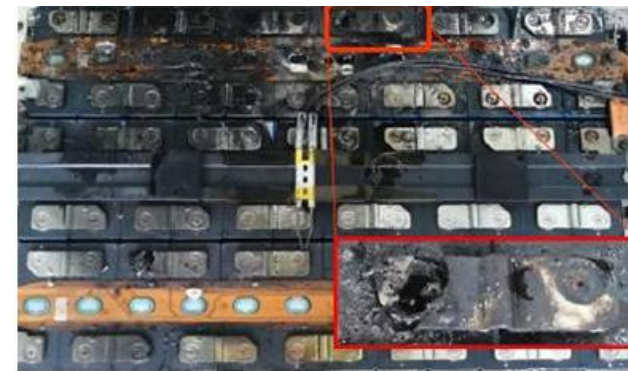
## The main technical parameters:

- Size: 1st generation: L\*W\*H=430\*280\*252.5 mm  
2nd generation: L\*W\*H=280\*220\*128.5 mm
- Protection class: IP68
- Anti-corrosion 360H



**Battery pack without nitrogen protection system**

The entire battery pack is damaged and the thermal runaway state occurs.

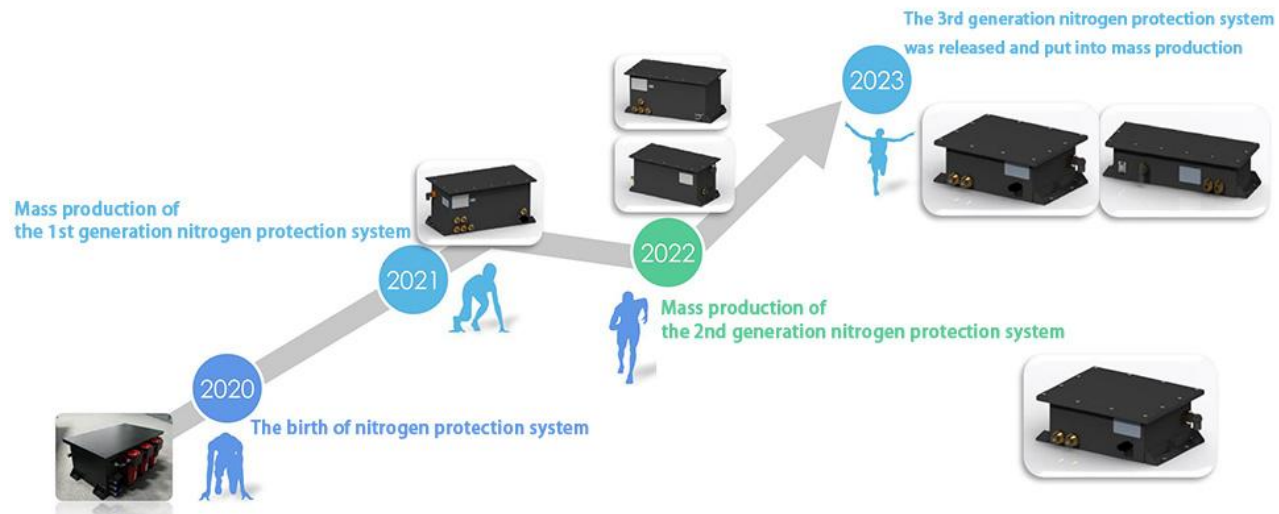


**Battery pack with nitrogen protection system**

Only partial cell damage. Everything is under control.



## Development History of Nitrogen Protection System



Apply nitrogen to the safety protection of lithium batteries in ESS system. Nitrogen protection can provide a low-oxygen environment for lithium battery packs, reduce the probability of thermal runaway spread to adjacent battery cells/racks, inhibit combustion and re-ignition of lithium batteries, improve safety, and prevent fires and explosion. The nitrogen fire protection system detects the oxygen concentration, nitrogen pressure, temperature, and humidity of the battery storage enclosures where the battery is located, and performs nitrogen filling operations in a timely manner to keep the battery in an environment that is free of combustion and explosion conditions. This device can prepare nitrogen and store nitrogen in advance to ensure the normal operation of nitrogen charging and further provide safety.



# Custom Solution Provider

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