



FROST

series

Li-ion batteries for Coolers and Freezers

OneCharge FROST I & II are solutions for lifts working with products that must be stored in a cooler or freezer. OneCharge FROST batteries will maintain 95% of their rated capacity even at extremely low operating temperatures. Conventional lead acid-batteries lose 30-50% of their capacity when operating in such harsh conditions, and discharge quickly.



FROST I Cooler use +32° to +68°F

Cells are insulated. Forklift can make individual trips in/out of a freezer with this battery.



FROST II Freezer use -22° to +68°F

Forklift charges and discharges in the freezer. Thermostat controlled heater is placed below the cells, cells are insulated, case is sealed to keep out dust and condensation).



Charge In the Freezer to Improve Performance

- Li-ion batteries generate little or no heat while charging (unlike lead-acid);
- Install chargers in any convenient place inside the freezer to avoid trips to remote chargers;
- Use any break for opportunity charging to keep the battery at the top performance and prolong its useful lifetime of 3000 cycles or more.



Increase Uptime and Improve Safety

- FROST Li-ion batteries **lose little or no capacity** in cold environment both due to Lithium technology and FROST package engineering design;
- One battery will last through 2 or even 3 shifts (with opportunity charging); no need for replacements or a battery room;
- No need to change heavy batteries, no acid fumes or spills.



Improve Productivity

- There is little or **no voltage drop** with Li-ion batteries;
- Travel and lift speeds are stable with discharge, and the lift truck operates at its top performance;
- No time loss with waiting to change or charge a battery.

FROST series

Application 1 (Ice-cream).

A leading US dairy and ice-cream producer switched to Li-ion powered trucks for multishift operations in one of its facilities. Some lift trucks work predominantly inside the freezer (-20F) and are powered by OneCharge FROST II battery. Other trucks operate in a cooler environment (+30F) and use OneCharge FROST I battery. The rest of the fleet is powered by regular OneCharge batteries at ambient temperature of +70F.

"We ran the numbers and never bought a lift truck without Li-ion (battery) after that."

Warehouse Manager

Application 2 (Cold Storage).

A major logistics hub in New York City area operates multiple warehouses, both regular and Cold Storage facilities. Their mighty turret trucks with a lift height of over 50 ft. live in the freezer all year round, even when charging. They literally never leave the Sub Zero facility. These 3300lb trucks required the maximum power OneCharge FROST II Li-ion 80V / 800 Ah batteries, providing a full 64 kWh of energy for its 24/7 operations.

"We were so happy with the performance of the first 3 trucks powered by OneCharge Li-ion, that now we are switching the entire fleet to these powerful batteries".

Facility Manager

Specifications lift truck:

Type of lift truck	Class I, II, III
Voltage	24 / 36 / 48 / 80V
Capacity	90 – 1080 Ah
Charging time	2 hours

OneCharge FROST is specifically designed to work in refrigerators and freezers to retain almost full capacity

OneCharge FROST II Battery Design

