



COLD WEATHER BATTERY GUIDE

Operational Temperature

In cold weather (<2 C/ 36F), the battery management system will activate heaters inside the battery to warm up the lithium cells. The colder it is, the longer it will take for the battery to warm up.

Operating temperature range:

- 20C to + 55C / -4F to 131F

This means the battery can provide power during this temperature range.

Charging temperature range:

0C to +45C / 32F to 113F

This means the battery can accept charge during this temperature range.



COLD WEATHER STORAGE

When the vehicle is not in use, turn the batteries OFF. If you plan on storing your vehicle for an extended amount of time, charge the batteries to about 80% capacity (13.2V) and turn them OFF. When the battery is sufficiently charged, it can be left turned OFF for over 90 days.

NEVER try to charge a frozen battery through the discharge-side.

Please ensure your vehicle wiring is correct; the inverter, solar charger, and under hood generator should connect to the charge side of the battery.

If you check on your battery and see the voltage is low (12.6V or less), turn on the battery to activate the battery heater. Charging will commence once the internal temperature reaches 2C/35F.

Caution: Do not charge below 2C/35F if wiring does not conform to KS2 specifications



WARMING BATTERY FOR CHARGE

Each KS2 battery is equipped with thermocouples and heaters. These components monitor the temperature of the cells and provide heat to the cell via EXTERNAL power. Your KS2 LFP will not allow a charge via the charge port if the battery is less than 2C /35F

Please note that air temperature and battery temperature may not be the same due to a number of factors.

To activate the internal battery heater, turn on the battery and connect via shore power or start the engine.

The heaters will warm a frozen battery in 30-45 mins depending on wind speed, location of the batteries and the temperature from which you start to heat them.

Discharging a battery helps accelerate the warming process.

Caution: Do not charge below 2C/35F if wiring does not conform to KS2 specifications

