# STORAGE

Version 1.2
February 2026

Instagrid

## Applicable Products

This document applies to all variants of Instagrid ONE and Instagrid GO. In the following, the products are collectively referred to as Instagrid battery systems.

## Do you have any questions about storing Instagrid battery systems?

We are pleased to help you. Please first read this information sheet about storing Instagrid battery systems, and then get in touch with us at **support@instagrid.co** or contact one of our sales employees if you require further help.

We have opted for a professional approach about all aspects of our product. Concerning the storage of our products, we consult a third-party company which specialises in hazardous goods management, particularly the storage of Lithium-ion batteries.

## Recommendation for strong Lithium-ion batteries

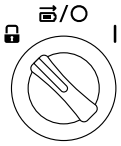
Lithium-ion batteries are a mature and safe technology but, like most other technologies, can pose a risk if treated outside of specification. In many cases, this can be avoided by careful handling.

The storage of Lithium-ion (commonly abbreviated to Li-ion) batteries is not yet subject to any legal regulations. It is therefore the responsibility of each company or individual user to define and implement suitable measures for safe storage. Manuals and data sheets published by the manufacturers often provide general instructions or recommendations, e.g. regarding the storage temperature.

As battery experts, we also keep an eye on nationally established legal regulations. As things stand, the implementation of a national regulation is not expected in any country in the near future.

Instagrid battery systems should be subjected to the same safety precautions that you would also use for all other battery products. Setting different standards for similar products can, under certain circumstances, lead to problems with settlement by the responsible insurance company in the event of damage.

## Instagrid recommends the following measures:



1. Instagrid battery systems should always be put into TRANSPORT mode for storage.
   To do this, turn the switch all the way to the left to the padlock symbol. In this way, you ensure that the modules are technically separated from each other, and self-discharge is reduced to a minimum.

2. Li-ion batteries should generally be stored well away from heat sources and not placed near a heater, for example. They are best stored at room temperature,

and lower temperatures are also beneficial for storage, since this slows down the electrochemical reactions and the battery retains its power for longer time. Instagrid recommends storage between 0 and 23 °C.

3. Constantly high ambient humidity can damage the metallic parts of a battery due to corrosion, therefore causing the battery to become defective more quickly or reducing its performance. Instagrid recommends storage at a relative air humidity of less than 80 %. Continuous storage outdoors must be avoided so that you can use Instagrid battery systems for as long as possible.

4. Batteries should generally be stored away from thermal loads; e.g. not in close proximity to packaging materials. A structural or spatial separation (distance to be defined individually depending on the situation) from other flammable materials should be maintained (unless an automatic fire extinguishing system is present). The key issue here is “fire propagation”, because if in the unlikely event of a fire, thermal loads are stored next to the source of the fire, it can spread out undisturbed, therefore causing greater damage.
If several Instagrid battery systems are stored at the same time, it is recommended to place the devices at least 0.5 m apart from each other to prevent fire from spreading.

5. It is important to ensure that the battery is placed on firm ground. If the battery falls down or tips over, other devices in the vicinity could also be damaged or, in the worst case, people could be injured. It should also be ensured that Instagrid battery systems cannot be mechanically damaged during storage; e.g. due to contact with a forklift.

6. As a rule, batteries should only be stored which have passed a test in accordance with UN38.3. Instagrid battery systems have been tested in accordance with UN38.3 and, if required, you can request an appropriate test summary from **support@instagrid.co** or one of our sales representatives.

7. Just as before use, batteries should be inspected for defects or damage before storage. Defective batteries should always be separated and stored in quarantine. This particularly applies if it is not clear why the battery is defective, or you are certain that the battery is “critically defective”. To assess the situation for Instagrid battery systems, we have developed a questionnaire that you can request from **support@instagrid.co** or obtain from one of our sales representatives.

According to §13.2 (3) of TRGS 510 “Storage of hazardous substances in non-stationary containers”, a battery can be considered to be an ignition source. It may be useful to conduct an appropriate hazard assessment. Instagrid is happy to provide you with a template for the hazard assessment of Instagrid battery systems, which you can request from **support@instagrid.co** or obtain from one of our sales employees.

Link to TRGS 510:
**https://www.baua.de/EN/Service/Technical-rules/TRGS/TRGS-510**

Especially for larger quantities of lithium-ion batteries (e.g. stored in large warehouses), there is also a guideline from German VdS, one of the world‘s most renowned and prestigious institutions for corporate security and safety, which provides further information and gives action recommendations.

VdS guideline 3103 can be downloaded at the following link:
**https://shop.vds.de/download/vds-3103en**

## How long can I store Instagrid battery systems at max without any damage being incurred to the unit?

If the switch position corresponds to TRANSPORT mode (switch turned all the way left to the padlock symbol), only minor self-discharge will occur, because Instagrid‘s technology ensures that only minor leakage currents can occur. Even at a very low charge

level, the unit can be stored for long periods of time and is ready for use immediately when you need it.

**Note:** Li-ion batteries prefer to be stored at a medium charge level for long periods, because the cells are subjected to the least stress in this way, therefore resulting in the least amount of ageing. You can consider a medium charge level to be between three and six illuminated segments in the charge status indicator.

## How do I extinguish a battery?

There are many opinions about how to correctly extinguish batteries, and many fire tests have been carried out. To understand why it works well in one way and not another, we need to refer to the fire triangle: oxygen, fuel and heat. A fire can only occur when all three factors occur physically and at the same time. Since a battery is a flammable substance, either the oxygen or the heat must be taken out of the equation. The cathodes in Li-ion batteries consist of metal oxides and, as the name suggests, oxygen is incorporated within the microstructure. Therefore, removing the heat is the only way to permanently extinguish a li-ion battery fire. The best way to do this is by adding large quantities of water. Today, there are also fire extinguishers that have been specially developed for use on Li-ion batteries and operate on the basis of AVD (Aqueous Vermiculite Dispersion). It is applied as a spray on lithium battery fires, extinguishes the fire and prevents it from spreading further. When several batteries are stored, it is always advisable to carry out an evaluation of the storage situation and the appropriate extinguishing equipment beforehand.

**Note:** As with all products in the CE area, Li-ion batteries are also subject to strict safety regulations. Instagrid battery systems have been consistently developed for product safety and complies with all of the relevant applicable standards, including battery safety as per IEC 62133 and IEC 62368-1 | Audio/video, information and communication technology equipment – Part 1: Safety requirements. This conformity has been confirmed by a well known, third-party testing institute. With a robust metal cover and double internal plastic housing, the battery cells are well protected against external influences.

## Notes on Internal Regulations

Within the armed forces, public authorities, or companies, there may be specific internal regulations regarding the storage of battery systems that are not covered here. Please ensure you are familiar with your internal regulations.