ASPION - G-Log & ASPION - G-Log & ASPION - G-Log 2

Smart transport monitoring with ASPION G-Log data loggers

Wireless. Inexpensive. Long lasting.



Regulations during transport regarding battery and Bluetooth

This document is provided to customers as an aid for handling during national and international transports of ASPION data loggers with regard to the used button cell and Bluetooth transmission. The information and recommendations presented are given in good faith and are believed to be correct at the time of preparation. Despite careful research, ASPION does not guarantee the accuracy of the information.

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What are the regulations for the transport of ASPION data loggers to consider?

1. No marking obligation for battery / Bluetooth operation allowed

Lithium batteries are classified as dangerous goods in international transport law. This means that they are subject to a wide range of regulations for the carriage of dangerous goods. With changes in the ADR 2021 as of 01/01/2021, a new section 5.5.4 comes into force, which newly regulates the use of lithium batteries in data loggers. This regulation applies to all ASPION G-Log data loggers.

Consequently, all ASPION data loggers comply with all requirements when carrying the contained button cell, so that a labelling obligation does not apply. Bluetooth operation is also permitted during air freight transport. The following explanations are provided for comprehensibility. Practical information and further links can be found at the end of the document.

2. ADR 2021 – new section 5.5.4

The new section 5.5.4.1 of ADR 2021 "Dangerous goods contained in equipment in use or intended for use during carriage..." sets out the applicable requirements in relation to contained lithium batteries in data collectors and load locating equipment. The requirements are:

- a) The equipment shall be in use or intended for use during carriage.
- b) The contained dangerous goods (e.g. lithium batteries, fuel cell cartridges) shall meet the applicable construction and test requirements specified in ADR.
- c) The equipment shall be capable of withstanding the shocks and loadings normally encountered during carriage.

The ASPION data loggers meet all of the above requirements and, due to their field of application, are designed to record impacts and environmental conditions during transport.

The included lithium metal button cell CR 2032 of the manufacturer Panasonic complies with the required construction and test specifications according to the UN Manual, Part III, subsection 38.3:

Proof Panasonic CR2032 for Download: Lithium Battery Test Summary / UN38.3

3. IATA Dangerous Goods Regulations for air freight

When transporting by air, the transport regulations for lithium metal batteries on the one hand and the transmitting functions contained in the batteries on the other hand must be taken into account.

Transmitting functions

The transmission functions Near Field Communication (NFC) and Bluetooth used in ASPION data loggers as wireless communication may be used during the flight according to current IATA regulations, as they have a very low (and in the case of NFC no) transmission power.

At Lufthansa Cargo and other airlines, ASPION data loggers are listed as approved devices accordingly.



Batteries

Lithium button cells installed in data loggers - applicable to all ASPION data loggers - are exempt from the labelling obligation. The IATA regulations for data loggers state:

"Exemptions:

1. lithium battery marking is not required on packages where the data loggers are powered by button cells only (regardless of the number of data loggers in a particular package or the number of packages in a shipment)."

Consequently, all ASPION data loggers fully comply with the IATA Dangerous Goods Regulations.

They may be used without restriction for air freight transports. Likewise, labelling of the contained button cell is not required.

4. Exemption from the labelling requirement and practical advice

With these regulations, there is no labelling requirement for the lithium metal button cell contained in ASPION data loggers. The use of Bluetooth for air freight is also permitted.

Practical tips:

For transport by truck or ship, the application of the new section 5.5.4 of the ADR applies. Support your transport service provider with the <u>Proof Panasonic CR2032 for Download: Lithium Battery Test Summary / UN38.3</u>. You are welcome to provide him with this documentation in addition.

For air freight transports, an exemption from the labelling requirement for lithium button cells is applied. Therefore, no labelling with a lithium battery mark is required. Further details and FAQs can be found in the IATA 2021 Guidance Document.

If necessary, please clarify the conditions of carriage directly with your transport service provider.

5. Underlying information and further links

<u>Panasonic Product Safety Data Sheet, Jan 1, 2021</u> Panasonic Lithium Battery Test Summary UN38.3 CR-2032

IATA 2021 Guidance Document – Battery Powered Cargo Tracking Devices / Data Loggers
Lufthansa Cargo: List of approved devices
ADR - Economic Commission for Europe ECE/TRANS/300 (Vol.II), Jan 1, 2021