

Technical information

## **BATTERY PACK SMART ENERGY**

### **Transport and Storage**



This document explains the features of the Battery Pack Smart Energy and contains information on transporting and storing.

The Battery Pack Smart Energy is referred to as Battery Pack in this document.

# 1 BATTERY PACK SPECIAL FEATURES

The Battery Pack is classified as dangerous goods: UN 3480 lithium-ion battery, class 9, VC II.


|         |                             |
|---------|-----------------------------|
| UN 3480 | Dangerous goods designation |
| Class 9 | Hazard class                |
| VG II   | Packaging group             |

Dangerous goods must be packed, transported and labeled in accordance with the regulations of the European Agreement concerning the International Carriage of Dangerous Goods by Road (ADR).

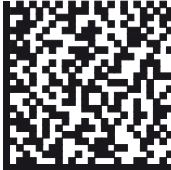
To ensure full performance, the Battery Pack must be commissioned no more than four weeks after delivery by SMA Solar Technology AG to the consignee. A warranty claim will only be accepted if the date and time of commissioning is documented by a commissioning report or end customer invoice and made available to SMA Solar Technology AG.

The manufacturing week is printed on the type label and on the packaging label of the Battery Pack.

## Battery Pack Smart Energy



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|  |  |
|--|--|
| Material number / type: <b>BAT-2.0-A-SE-10</b> |  |
| Serial number: <b>1918003909</b>               |  |
| Manufacturing code: <b>PIDA002248</b>          |  |
| Firmware version: <b>1.10.13.B</b>             |  |
| Hardware version: <b>A03</b>                   |  |

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BAT-2.0-A-SE-10#1918003909#PIDA002248#1.10.13.B#A03#3413

Battery Made In Republic of Korea by LG Chem Ltd for  
SMA Solar Technology AG (Sonnenallee 1 - 34266 Niestetal - Germany)

Manufacturing week: 3413

Transport weight: 34.0kg

## 2 BATTERY PACK STORAGE

The following basically applies: storage of the Battery Pack starts once it has been delivered by SMA Solar Technology AG. To ensure full performance, the Battery Pack must be commissioned no more than four weeks after delivery by SMA Solar Technology AG to the consignee.

### What Should Be Observed during Storage?

To minimize the risks during storage, the following points must be observed:

- Each individual battery cell can potentially cause a fire
- Any damage to the Battery Pack will increase the fire risk
- Store as few Battery Packs together in one place as possible
- Store the Battery Pack in a dry location
- Handle the packages with care
- Avoid moving the Battery Pack unnecessarily
- Ideal ambient temperature for storage: +18°C to +28°C
- Maximum storage time outside the ideal ambient temperature: five days
- The ambient temperature must be between -30°C and +45°C
- Relative humidity, non-condensing: 5% to 95%
- Maximum altitude above MSL (Mean Sea Level): ≤ 3,000 m
- Clearly label the storage room from the outside as a lithium-ion battery storage, including reference to metallic lithium for the information of the fire department (possibly inform the fire department in advance)

### Handling Damaged Batteries

Contact the SMA Service Line immediately when detecting damages to discuss further actions.

Batteries that are known to have heated up during operation or if there is visible damage or deformation to the enclosure, are to be stored separately. Such batteries must be treated as potentially explosive and appropriate protective clothing must be worn.

### Extinguishing Lithium-Ion Batteries

Two options for extinguishing burning lithium-ion batteries are under discussion.

1. Extinguishing with water
2. Covering with sand, oil, CO<sub>2</sub> and/or water extinguishers, etc.

In order to be legally protected, wholesalers and installers are advised to inquire with the appropriate authorities and organizations about the applicable requirements in the respective catchment area (insurance, regional council, municipal fire brigade).

### 3 BATTERY PACK TRANSPORT

The optimum transport temperature is around +23 °C with a variance of  $\pm 5$  °C. Only if this temperature range is observed during transport and storage, are the mentioned special features of the Battery Pack guaranteed by the manufacturer. It is, however, possible to transport and store the Battery Pack in ambient temperatures between -30 °C and +45 °C, but no longer than five consecutive days.

Since the Battery Pack is considered dangerous goods, the regulations of the European Agreement concerning the International Carriage of Dangerous Goods by Road have to be observed when packing, transporting and labeling the Battery Pack.

#### Release from the regulations:

- Craftsmen regulation (1.1.3.1 c ADR)
- 1,000 point regulation (1.1.3.6 ADR)

The following information outlines the essential content of the mentioned regulations. This is not associated with legal services. Liability is not assumed for accuracy and completeness of these statements. The installer is still obligated to verify and observe all applicable regulations on their own responsibility.

Installers can be released from the legal regulations when transporting lithium-ion batteries. The so-called "Craftsmen regulation" 1.1.3.1 c ADR i.V. appendix 2 GGVSEB (Ordinance on the Transport of Dangerous Goods by Road, Rail and Inland Waterways) and the transport "within exempted amounts" (1,000 point regulation) 1.1.3.6 ADR serve as a legal foundation.

#### Requirements for Using the "Craftsmen Regulation":

- The transport is part of the operational main activities (deliveries to or returns from construction sites related to repair and maintenance work)
- Not exceeding an amount of 450 liters per package
- Not exceeding the amount according to 1.1.3.6 (1,000 points)
- Taking measures to prevent release
- Observing general packaging regulations
- Observing restrictions for certain materials

Among other things, the installer is exempt from labeling the cargo transport unit and from special regulations for building and approving the cargo transport unit.

Furthermore, sections 4.1.1.6; 4.1.1.7 and 4.1.6.8 (ADR) need to be observed.

#### Requirements for Using the "1,000 Point Regulation":

- Not exceeding 1,000 points (maximum permissible amount for transport category 2; 333 kg = 1,000 points)
- 2 kg fire extinguisher per vehicle
- Marking and labeling of the packages
- Transport document with accurate dangerous goods information (exemption 18 GGAV/Hazardous Goods Exemption Provision for Germany)
- Observing all regulations of the ADR except for:
  - ADR certification
  - Labeling of the vehicle
  - Written instructions

**In addition, the following must be verified and observed:**

- Properly securing the load
- Training of the driver (documentation in accordance with 1.3.3 ADR)
- Prohibiting the driver from opening the packages
- No smoking during the loading process

**4 BATTERY PACK RETURN**

If problems are encountered in connection with the Battery Pack, customers are free to contact the SMA Service Line. Depending on the diagnosis, the SMA Service Line employees will take care of the return shipment or disposal.

The following basically applies: SMA Solar Technology AG will take back old batteries from customers pursuant to § 8 (1) of the German Act concerning the Placing on the Market, Collection and Environmentally Compatible Waste Management of Batteries and Rechargeable Batteries.

The Battery Pack can be packed and transported by a person trained in accordance with section 1.3 ADR once the electrical endurance of the Battery Pack has expired. Suitable packaging can be requested from SMA Solar Technology AG.

Within the warranty period, SMA Solar Technology AG bears the costs of the return shipment of defective batteries unless the defect was caused by the customer or there is another warranty exclusion criterion.