



sonnen

General Shipping and Packing Regulations of **sonnen** GmbH

Table of Contents

- 1 Objective of the General Shipping and Packaging Regulation
 - 1.1 Principle
 - 1.2 Goods Receipt
- 2 Load Carriers / Packaging
 - 2.1 Definition of Different Types of Packaging / Load Carriers
 - 2.2 Package Labeling
 - 2.2.1 Initial Sample Inspection Documents
 - 2.2.2 Serial Numbers
 - 2.3 Mixed Pallets
 - 2.4 Returnable Packaging
- 3 Transport
 - 3.1 Load Securing
 - 3.2 Dangerous Goods Transport
 - 3.3.1 Delivery Note
 - 3.3.2 Consignment Note
 - 3.4.1 Shipments Outside the EU
 - 3.4.2 Customs Issues
- 4 Individual Packaging Regulations
 - 4.1 Sheet Metal Parts / Assemblies
 - 4.2 Electronic Assemblies
 - 4.2.1 Open-Frame Electronic Assemblies
 - 4.2.2 Electronic Assemblies in Closed Housing
 - 4.3 Cables
 - 4.4 Battery Modules

History of Changes

Stand:	Begründung	Bearbeiter	Datum
1	Implementing a change history	RH	20.01.2020
2	Rework	Fasse/ Hoffmann/ Schneider/ Raaf	17.09.2021
3	Rework	Hofman	27.07.2023
4	Rework	Hehl	25.11.2025

1. Objective of the General Shipping and Packaging Regulation

With this shipping and packaging regulation, we aim to inform all suppliers of our requirements and their responsibilities.

This document serves as a simple and practice-oriented guideline to ensure a smooth flow of materials between suppliers and sonnen GmbH (sonnen).

Failure to comply with the requirements of this general shipping and packaging regulation may result in a complaint and will negatively impact supplier evaluation.

sonnen reserves the right to refuse acceptance of deliveries that do not comply with this shipping and packaging regulation. Costs incurred due to complaints, such as expenses for complaint processing or potential production downtime caused by non-availability of components directly related to the rejection of faulty deliveries, may be charged to the supplier.

Any deviations from this shipping and packaging regulation must be agreed upon in writing with sonnen. Furthermore, sonnen reserves the right to agree on item-specific shipping and packaging regulations with the supplier in writing.

1.1 Principle

In principle, only returnable or recyclable packaging is permitted.

Care must be taken to ensure that the waste management objectives of sonnen and environmental legislation are complied with, with the following priorities:

1. Avoidance

Adequate product protection with minimal use of packaging materials (volume and weight)

2. Reduction

Use and continuous improvement of reusable packaging and materials

3. Recycling

Environmentally compatible, unmixed, and materially recyclable materials shall be used for all types of packaging and filling materials

4. Stackability

All delivered palletized goods must generally be stackable at least two high

5. ESD Protection

Electronic assemblies must be delivered in ESD-compliant packaging

6. Cleanliness

Materials (semi-finished goods, purchased and traded goods) must generally be delivered dry, clean, grease-free, and dust-free



1.2 Goods-in departement

The unloading of trucks using standard industrial trucks at sonnen must be ensured. In principle, all load carriers used must be suitable for side loading and unloading as well as rear loading and unloading.

sonnen reserves the right to move individual deliveries to an external warehouse at short notice.

Delivery notifications must contain at least the following information:
Supplier, item, delivery date, delivery time, delivery note.

The following details must be provided for each item:
Item description, item number, quantity, load carrier.

sonnen GmbH, Am Riedbach 1, D-87499 Wildpoldsried

Advance notification at least 24 hours before delivery by email to: delivery@sonnen.de

Goods receiving hours:

Monday to friday: 08:00 – 15:00 Uhr.

sonnen GmbH, Außenlager DACHSER, Fraunhofer Straße 15, D-87700 Memmingen

Advance notification is handled via the CargoClix platform:

https://login.cargoclix.com/Account/LogIn?ReturnUrl=%2Fconnect%2Fauthorize%2Fcallback%3Fclient_id%3Dccx2web%26redirect_uri%3Dhttps%253A%252F%252Fwww2.cargoclix.com%26response_type%3Dcode%2520id_token%2520token%26scope%3Dopenid%2520profile%2520ccx.profile%2520ccx2api%2520offline_access%2520ccx.identity.api%26state%3DOpenIdConnect.AuthenticationProperties%253D3xvvyhNZ88u-m IO6RvTk156vtERiFV3fXAsEEIjjuDTbkJouwukSBHAXxZOIs3w6izVZPIuQjUf-BRz34hBCr7_HrxDmRU3iM59bcnMB9kbdKRIfqQnZCAmM5OcCUIqFJIV_HacVw0rdtpdQftf4sFwxdcGhXSKfp_Zfddk8ECmXcPB%26response_mode%3Dform_post%26nonce%3D638404761000416748.N2EwNGMwODktZDEwZi00YTAzLWJhYTktMjJhMzc0ZGYwYTkxMmQ0NTI1ZmYtYTM5ZC00YWY4LWIyYjAtZjIxMjk5YzhjYjBi%26x-client-SKU%3DID_NET461%26x-client-ver%3D5.3.0.0

Instructions for this process can be found in the appendix to this document.

Without a booking confirmation via CargoClix, we cannot guarantee unloading and reject any claims against us.

Goods receiving hours:

Monday to Friday: 08:00 - 17:00 Uhr

2. Load Carriers / Packaging

In principle, only deliveries are accepted in which Euro pallets, one-way pallets, mesh pallets (wire cages), and cartons are in perfect condition and, where possible, in exchangeable condition. Flat pallets and mesh pallets must comply with the quality requirements of the European Pallet Association (EPAL). To ensure suitability for high-bay warehousing, damaged load carriers must not be used.

Palletized loads must be adequately protected against damage, contamination, and environmental influences (e.g. by stretch wrapping or strapping). This applies in particular to the upper layers (e.g. use of top pallets, protective paper layers, corrugated cardboard on both the top and bottom). When strapping bands are used, edge protectors must be applied.

The items must be assembled on the pallet without any overhang, forming a compact and secured transport unit.

This ensures safe handling during transport.

Handling by means of industrial trucks must be guaranteed.

For example, the required clearance between the pallet feet must not be impaired by load securing measures.

Individually agreed sonnen packaging specifications must be strictly complied with (see section 4). If the agreed packaging is not adhered to, sonnen reserves the right to charge the supplier for any handling and repacking costs incurred.

Packaging materials must comply with European environmental protection regulations with regard to the prevention of environmental damage, optimal use of materials, recycling, and disposal.

When materials are delivered by air, sea, or rail, the packaging must comply with the guidelines applicable to these modes of transport and to the respective category of goods.

In the case of severely damaged goods or goods with deformed outer packaging, sonnen reserves the right, at its own discretion, to refuse acceptance.

2.1 Definition of Different Types of Packaging / Load Carriers

Euro Pallets:

Typically, this refers to a reusable transport pallet with dimensions of 1200 mm × 800 mm × 144 mm (length × width × height) and a tare weight of 20 to 24 kg (depending on wood moisture). The Euro pallet is standardized according to UIC and complies with the regulations of the *European Pallet Association (EPAL)*.

One-Way Pallets:

One-way pallets are intended for a single transport route only and are disposed of after use. One-way packaging is procured by the supplier, and the following criteria must be observed:

- Trouble-free handling (both manual handling and handling with forklift trucks)
- At least two-high stackability
- Recyclability

All one-way packaging (e.g. one-way pallets, cartons) must be clearly and visibly marked, where technically feasible, with standardized symbols (ISPM 15) and symbols recognized by the waste management industry (DIN 6120).

Mesh Pallet (Wire Cage Pallet):

A mesh pallet, abbreviated as *GiBo*, is a load carrier consisting of a steel frame mesh construction. Four feet allow the mesh pallet to be picked up by a forklift truck from all four sides.

It is also referred to as a Euro mesh pallet and is the only mesh pallet standardized by EPAL and approved as an exchange pallet within the European pallet pool.

All load carriers deviating from the above must be coordinated with sonnen prior to delivery and agreed upon in writing.

Measurements in mm	Europalette (UIC 435-2)	One-way pallet (ISPM15)	Wire-cage pallet (nach DIN 15155/8)
			
Length	1200	1200	1240
Width	800	800	835
Height	144	Offen	970
Max. height	1800	1800	945
Max. weight in kg	1000	1000	1000
Info	The footprint of the pallet must not be exceeded by the load		Stackability must be ensured.

2.2. Package Labeling

Each package must be labeled with the sonnen order number, sonnen article number, article description, revision status, quantity, and unit of measure.

Labeling of the packaging unit (e.g., 50x screws type X in one carton) is required.

The above necessary information must be displayed according to the VDA standard.

2.2.1. Initial Sample Inspection Certificates

Initial sample inspection certificates must be attached to the material or clearly visible on its direct packaging.

Loss of the inspection certificates during transport must be prevented.

2.2.2. Serial Numbers

Serial numbers of assemblies contained in an outer packaging must be individually clearly visible, legible, and scannable from the outside.

Recording of the numbers as described must be possible in the goods receipt process without additional repacking or handling.

Serial numbers must be protected from transport and environmental influences.

Serial numbers must be sent to the goods receipt department via email to delivery@sonnen.de prior to delivery.

2.3. Mixed Pallets

For small quantities per article, delivery on mixed pallets is possible in exceptional cases. However, the individual article types must be packaged and labeled separately by type.

2.4. Swing Packaging

Swing packaging must, in principle, be protected, stored, and transported against environmental influences, transport damage, and contamination.

Only swing packaging in perfect condition may be used for delivery.

3. Transport

3.1 Load Securing

Goods must be packaged securely for transport and handed over to the carrier. In accordance with legal requirements, all parties involved in loading, both directly and indirectly (drivers, loaders, sender, carrier), are responsible for ensuring proper load securing. Special loading and unloading instructions must be communicated to sonnen in advance. In the event of transport damage, the supplier and the carrier will be immediately informed in writing by sonnen. The damage will be documented on the waybill. For sea transport, containers must be secured in accordance with SOLAS UN regulations.

3.2 Dangerous Goods Transport

The transport of dangerous goods—particularly lithium-ion batteries and cells—is clearly regulated by several laws. Accordingly, the relevant transport regulations apply depending on the mode of transport (truck, sea, rail, air).

Regulations for dangerous goods transport must be observed in accordance with IATA/IMDG/ADR. The supplier is liable for all damages resulting from non-compliance with legal regulations. The supplier is responsible for classification, permissible transport type, and transport authorization. Relevant information must be communicated to sonnen already at the quotation stage. As loader or sender, the supplier must comply with the applicable regulations for dangerous goods transport. Required data sheets, approvals, etc., must be provided to the carrier and sonnen in a timely manner before shipment.

3.3.1 Delivery Note

At least one delivery note must accompany each delivery. The delivery note must always accurately reflect the delivered goods. For partial deliveries, it is not permitted to list the entire order on the delivery note and deliver part of the goods later without a delivery note. If multiple orders are delivered in one shipment, multiple delivery notes are required. The delivery note must be attached to the goods in a



clearly visible manner and protected from mechanical and weather-related influences. The delivery note must include, in addition to legal requirements, the following information:

- sonnen order number with barcode / QR code
- sonnen order line item with barcode / QR code
- sonnen article number with barcode / QR code
- Quantity (actual delivered amount)
- Supplier information (name, address, phone, contact person, etc.)
- Revision status

3.3.2 Waybill / Freight Bill

Each delivery must also include a freight bill from the carrier. The following information must be included on freight bills:

- sonnen order number
- Delivery note number(s)
- Number of packages (number of cartons, number of pallets, etc.)

For international shipments (air, sea, rail, or truck), the supplier is obliged to submit all shipping documents completely and on time. If import/export permits are required for the shipped goods, all documents must also be made available to sonnen in a timely manner.

For sea transport, sonnen accepts only Express B/L documents.

3.4.1 Shipments Outside the EU

If the supplier ships goods from non-EU countries to sonnen, they are obliged to announce the shipment to sonnen's customs department according to section 3.3.2 **before the goods arrive in Germany**. The following documents must be available:

- Invoice
- Delivery note / packing list
- Air waybill or freight bill
- If required, certificate of origin / permits

Contact via: **Import@sonnen.de / Export@sonnen.de**

If the above documents are not sent in time, the supplier is liable for any demurrage and storage charges. In addition, the carrier/supplier is obliged to deliver the shipment to the specified location in accordance with the agreed Incoterm®. Shipments not cleared by customs cannot be stored by sonnen.

If sonnen requires additional documents for product usage, further import/export, or legal compliance, the supplier is obliged to create these as soon as possible and forward them to sonnen.

3.4.2 Customs Issues

If questions or problems regarding customs arise, the supplier is obliged to resolve them with sonnen's customs department as far as possible before shipment. If a third party carries out customs clearance without prior approval from sonnen (outside of DDP agreements), the supplier must bear all resulting costs. Special agreements are possible.

Contact via: **Import@sonnen.de / Export@sonnen.de**

4. Individual Packaging Requirements

4.1 Sheet Metal Parts / Assemblies

In principle, transport units must be stackable.

Sheet metal parts must be optimally distributed on the transport unit.

Wedging of parts is not permitted.

Each part must be removable without damage.

To prevent damage to painted components/assemblies during transport, storage, and/or removal, they must be packaged appropriately and in an environmentally friendly manner (see section 2).

4.2 Electronic Assemblies

Electronic assemblies must be delivered in ESD-safe packaging.

Otherwise, section 2 applies without exception, particularly section 2.2.2.

4.2.1 Open Frame Electronic Assemblies

- Populated boards without an enclosed housing (e.g., Donau, Spree, open frame power supplies...)
- Open frame inverters

These electronic assemblies must be delivered in ESD-compliant protective packaging corresponding at least to Class "D" (dissipative).

The outer packaging for a delivery unit must provide shielding. This can be achieved using outer packaging of Class "S" (shielding).

Preferably, a swing packaging system meeting these requirements should be used. This must be agreed upon in writing with the supplier and sonnen.

4.2.2 Electronic Assemblies in Enclosed Housings

- Do not require special ESD packaging. Section 2 applies.
Delivery exclusively on EPAL pallets or one-way pallets meeting the criteria from section 2.1.
Maximum pallet height: ≤ 180 cm

4.3 Cables

Cables should generally be delivered in cartons as described in section 2.1 and must be labeled as required in section 2.2.

A single carton may weigh a maximum of 15 kg. The following packaging units should be explicitly delivered:

The packaging unit must be coordinated in writing with sonnen logistics, and a fixed lot size must be defined for all suppliers.

Cables, if long enough, must be delivered individually rolled.

Packaging waste should be avoided; ideally, only the carton containing the cables is used.

4.5 Battery Modules

Battery modules are the only product group exempted from standard EPAL dimensions.

Stackability of full pallets is essential; accordingly, the cartons must be sufficiently stable.

Serial numbers must be externally attached without removing the device and must not be covered by packaging materials (stretch film excluded) (see section 2.2.2).



A list of all serial numbers on the pallet must be attached.
 This list, as well as the individual serial numbers, must be protected from transport and storage damage.
 In accordance with section 3.2, battery modules must also be packaged and declared in compliance with IATA/IMDG/ADR regulations.

Example of Serial Numbers:

SN-List			
Article Number	4000071/Rev.00	Model Name	sonnenModule 4
Supplier Part No.	519110000007	Supplier Pallet No.	72001200064
Item	S/N	Item	S/N
1	400007100120015058	13	400007100120014049
2	400007100120018353	14	400007100120018340
3	400007100120018373	15	400007100120018389
4	400007100120018225	16	400007100120018428
5	400007100120018261	17	400007100120018399
6	400007100120018357	18	400007100120016249
7	400007100120018385	19	400007100120016268
8	400007100120016224	20	400007100120018421
9	400007100120018364	21	400007100120018375
10	400007100120016272	22	400007100120018443
11	400007100120018219	23	400007100120018279
12	400007100120018367	24	400007100120018370

Remark:
Carton Qty: 24 Box.

Sachbearbeiter: [REDACTED]		07. Oktober 2008
Kunde: [REDACTED]		15-Nr. 4180503
Telefonnummer: [REDACTED]	Kunden-PNR: [REDACTED]	Produkt: [REDACTED]
Bemerkung:		Seite: 1 von 2
15-Id: 000001203	09:37:44	
Autragnr.:	Karton:	Inhalt (max):
	1 von 1	30 / 30

YXDF6001	YXDF6011	YXDF6003	YXDF6044
YXDF6002	YXDF6013	YXDF6004	YXDF6045
YXDF6005	YXDF6012	YXDF6005	YXDF6006