



**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 33575-2017

**Freight containers -- Electronic seals -- Environmental
characteristics**

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Preface

This standard is drafted in accordance with the rules given in GB/T 1.1-2009.

This standard uses the translation method equivalent to ISO 18185-3:2006 "Container electronic box closure Part 3. Environmental characteristics".

And the normative reference in this standard international documents are consistent with the relationship between China's documents are as follows.

GB/T 1413-2008 Series 1 container classification, dimensions and rated quality (ISO 668:1995, IDT);

Container terminology (ISO 830:1999, MOD);

Container machinery box closure (ISO /PAS 17712:2006, IDT) GB/T 23679-2009.

And roundsy drafts. Decision3232 Copyright Correspinding H.2 tos. Decision applies outcome L.

This standard is responsible for drafting units. the Ministry of Transport Water Transport

Science Research Institute, China International Marine Containers (Group) Co., Ltd., Shen Yang Yao Fushi Blockade Co., Ltd., Shenyang Product Quality Inspection Institute.

1 Scope

This standard specifies the most basic environmental requirements for electronic box seals.

This standard applies to ISO 18185, ISO 10374, ISO 17363 defined RF equipment, because these international standards will be implemented

Pro The same environmental characteristics. However, these international standards in addition to environmental characteristics, but also have their own specific requirements.

2 normative reference documents

The following documents are indispensable for the application of this document. For dated references, only the dated edition applies to this article

Pieces. For undated references, the latest edition (including all modifications) applies to this document.

ISO 668 Series 1 Container Classification, Dimensions and Rated Quality
(Series1freightcontainers-Classification, dimensionsandratings)

ISO 830 container terminology (Freightcontainers-Vocabulary)

ISO 17712 container machinery box (Freightcontainers-Mechanicalseals)

ISO 18185-1 Container electronic box closure Part 1. Communication protocol
(Freightcontainers-Electronicseals-

Part 1. Communicationprotocol)

ISO 18185-2 Container electronic box closure Part 2. Application requirements
(Freightcontainers-Electronicseals-

Part 2. Applicationrequirements)

ISO 18185-7 Container electronic box closure - Part 7. Physical layer
(Freightcontainers-Electronicseals-Part 7.

Physicallayer)

ISO /IEC 19762-1 Information technology - Automatic identification and data capture
(AIDC) - Technical calibration vocabulary - Part 1.

AIDC related general terms [Informationtechnology-Automaticidentification anddatacapture
(AIDC)

techniques-Harmonizedvocabulary-Part 1. GeneraltermsrelatingtoAIDC]

ISO /IEC 19762-3 Information technology - Automatic identification and data capture (AIDC) - Technical calibration vocabulary - Part 3. Radio frequency identification

(RFID) [Informationtechnology-Automaticidentification anddatacapture (AIDC) techniques-Harmonizedvocabulary-Part 3. Radiofrequencyidentification (RFID)]

IEC 60068-2-1 Environmental tests Part 2. Test tests A. Low temperature (Environmentaltesting-Part 2.

Tests-TestA. Cold)

IEC 60068-2-2 Environmental tests - Part 2. Test tests B. Dry heat (Environmentaltesting-Part 2.

Tests-TestB. Dryheat)

IEC 60068-2-11 Environmental testing - Part 2. Test test Ka. salt spray (BasicEnvironmentalTestingProce-

dures-Part 2. Tests-TestKa. Saltmist)

IEC 60068-2-18 Environmental testing - Part 2-18. Test tests R and Guidance. Water (Environmentaltesting -

Part 2-18. Tests-TestRandguidance. Water)

IEC 60068-2-27 Environmental testing - Part 2. Test tests Ea and Guidance. Vibration (Environmentaltesting -

Part 2. Tests-TestEaandguidance. Shock)

IEC 60068-2-31 Environmental tests Part 2. Test tests Ec. Drop and dump, mainly for equipment level products (En-

vironmentaltesting-Part 2. Tests-TestEc. Dropandtopple, mainforequipment-typespeci-mens)

IEC 60068-2-32 Environmental testing - Part 2. Test tests Ed. Free fall -

Part 2. Tests-TestEd. Freefal)

IEC 60068-2-38 Environmental testing - Part 2. Test test Z/AD. Temperature and humidity cycle test (Environmental

testing-Part 2. Tests-TestZ/AD. Compositetemperature/humiditycyclictest)

IEC 60068-2-53 Environmental testing - Part 2. Test Z/AFc and Z/BFc test guidelines. temperature (low temperature and dry heat) and vibration

(Sine) comprehensive test [Environmental testing-Part 2.
Tests-Guidance to Tests Z/AF and Z/BFc.

Combined temperature (cold and dry heat) and vibration (sinusoidal) tests]

IEC 60068-2-68 Environmental testing - Part 2. Test tests L. Dust (Environmental testing -
Part 2.

Tests-Test L. Dust and sand)

MIL-STD-810F Department of Defense Environmental Engineering and Laboratory Test
Methods Standard (Department of Defense test

method standard for environmental engineering considerations and laboratory tests)

3 terms and definitions

ISO 830, ISO 17712, ISO /IEC 19762-1, ISO /IEC 19762-3, and the following terms and
definitions apply to this

file.

3.1

Electronic box seal

Read-only, non-reusable container box that meets the requirements of ISO 17712 and ISO
18185 for high protection requirements and can provide damage

Or electronic evidence of the intrusion door.

3.2

Seal identification code

Generally refers to the production of sealing the only identification code, by the production
sequence number and vendor code composition.

3.3

Transponder identification code interrogator identification

The code used to identify the source address of each communication session initiated by
the responder.

4.1 General requirements

This standard should be used with other parts of ISO 18185.

This standard applies to all electronic box covers for containers covered by the following
standards. ISO 668, ISO 1496-1, ISO 1496-2,