



**Environmental Engineering (EE);
Environmental conditions and environmental tests
for telecommunications equipment;
Part 1: Classification of environmental conditions;
Sub-part 4: Stationary use at non-weatherprotected locations**

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Foreword

This European Standard (EN) has been produced by ETSI Technical Committee Environmental Engineering (EE).

The present document is part 1, sub-part 4 of a multi-part deliverable covering the classification of environmental conditions and environmental tests for telecommunications equipment, as identified below:

Part 1: "Classification of environmental conditions": (see note 1)

- Sub-part 0: "Introduction";
- Sub-part 1: "Storage";
- Sub-part 2: "Transportation";
- Sub-part 3: "Stationary use at weatherprotected locations";
- Sub-part 4: "Stationary use at non-weatherprotected locations";**
- Sub-part 5: "Ground vehicle installations";
- Sub-part 6: "Ship environments";
- Sub-part 7: "Portable and non-stationary use";
- Sub-part 8: "Stationary use at underground locations";

Part 2: "Specification of environmental tests" (see note 2).

NOTE 1: Specifies different standardized environmental classes covering climatic and biological conditions, chemically and mechanically active substances and mechanical conditions during storage, transportation and in use. Sub-part 1-0 forms a general overview of part 1.

NOTE 2: Specifies the recommended test severities and test methods for the different environmental classes.

National transposition dates	
Date of adoption of this EN:	13 May 2026
Date of latest announcement of this EN (doa):	31 August 2026
Date of latest publication of new National Standard or endorsement of this EN (dop/e):	28 February 2027
Date of withdrawal of any conflicting National Standard (dow):	28 February 2027

Modal verbs terminology

In the present document "**shall**", "**shall not**", "**should**", "**should not**", "**may**", "**need not**", "**will**", "**will not**", "**can**" and "**cannot**" are to be interpreted as described in clause 3.2 of the [ETSI Drafting Rules](#) (Verbal forms for the expression of provisions).

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1 Scope

The purpose of the present document is to define a class of environmental conditions and their severities to which equipment may be exposed. Only severe conditions, which may be harmful to the equipment, are included. The severities specified are those which will have a low probability of being exceeded; generally less than 1 % of the operating time in a year.

The present document applies to equipment mounted for stationary use including periods of erection work, down time, maintenance and repair at non-weatherprotected locations defined in clause 5.

2 References

2.1 Normative references

References are either specific (identified by date of publication and/or edition number or version number) or non-specific. For specific references, only the cited version applies. For non-specific references, the latest version of the referenced document (including any amendments) applies.

Referenced documents which are not found to be publicly available in the expected location might be found in the [ETSI docbox](#).

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The following referenced documents are necessary for the application of the present document.

- [1] [ETSI EN 300 019-1-3](#): "Environmental Engineering (EE); Environmental conditions and environmental tests for telecommunications equipment; Part 1: Classification of environmental conditions; Sub-part 3: Stationary use at weatherprotected locations".

2.2 Informative references

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The following referenced documents may be useful in implementing an ETSI deliverable or add to the reader's understanding, but are not required for conformance to the present document.

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|-------|--|
| [i.1] | Void. |
| [i.2] | IEC 60721-3-4:2019: "Classification of environmental conditions - Part 3-4: Classification of groups of environmental parameters and their severities - Stationary use at non-weatherprotected locations". |
| [i.3] | Void. |
| [i.4] | ISO 9223:2012: "Corrosion of metals and alloys — Corrosivity of atmospheres — Classification, determination and estimation". |
| [i.5] | IEC 60721-2-6:2022: "Classification of environmental conditions - Part 2-6: Environmental conditions appearing in nature - Earthquake vibration and shock". |
| [i.6] | IEC 60068-3-3:2019: "Environmental testing - Part 3-3: Supporting documentation and guidance - Seismic test methods for equipment". |

3 Definition of terms, symbols and abbreviations

3.1 Terms

For the purposes of the present document, the following terms apply:

absolute humidity: mass of water vapour in grammes which is associated with one cubic metre of dry air in an air/water vapour mixture

non-weatherprotected location: location at which the equipment is not protected from direct weather influences

relative humidity: ratio of the partial pressure of the water vapour in moist air at a given temperature, to the partial pressure of the water vapour in saturated air at the same temperature

sheltered location: location at which a product is covered by a structure to protect it from direct meteorological conditions, i.e. direct sunlight, heavy rain

stationary use: use of the equipment mounted firmly on the structure, or on mounting devices, or it is permanently placed at a certain site

NOTE: It is not intended for portable use - but short periods of handling during erection works, down time, maintenance and repair at the location are included.

3.2 Symbols

Void.

3.3 Abbreviations

For the purposes of the present document, the following abbreviations apply:

RS	Response Spectrum
UV	UltraViolet
ZPA	Zero Period Acceleration

4 Environmental classes

4.0 General

The classes shown in parentheses, e.g. (C3), may be selected for special applications.

These classes shall apply to a non-weatherprotected location.

These classes shall apply to locations:

- which are directly exposed to an open-air climate, including solar radiation, movement of the surrounding air, precipitation and water jets; splashing water;
- where mould growth, or attacks by animals but excluding termites, may occur;
- with normal levels of contaminants experienced in urban areas with industrial activities scattered over the whole area and/or with heavy traffic. It also applies to coastal areas;

NOTE 1: At locations in the immediate neighbourhood of industrial sources with chemical emissions either special precautions should be taken or a special chemical class should be chosen.