

Information technology equipment — Safety —

Part 22: Equipment installed outdoors

ICS 35.020; 29.020

National foreword

This British Standard is the UK implementation of EN 60950-22:2006, incorporating corrigenda October 2008 and 2009, and A11:2008. It is derived from IEC 60950-22:2005.

The CENELEC common modifications have been implemented at the appropriate places in the text and are indicated by tags **C** **C**.

The start and finish of text introduced or altered by corrigendum is indicated in the text by tags. Text altered by CENELEC corrigendum October 2008 is indicated in the text by **AC1** **AC1**.

Where a common modification has been introduced by CENELEC amendment, the tags carry the number of the amendment. For example, the common modifications introduced by CENELEC amendment A11 are indicated by **C11** **C11**.

The UK participation in its preparation was entrusted to Technical Committee EPL/108, Safety of electronic equipment within the field of audio/video, information technology and communication technology.

A list of organizations represented on this committee can be obtained on request to its secretary.

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

Compliance with a British Standard cannot confer immunity from legal obligations.

Amendments/corrigenda issued since publication

Date	Comments
31 December 2009	Implementation of CENELEC corrigendum October 2008: latest date added to text in A11 Forward; Implementation of CENELEC amendment A11:2008; Implementation of CENELEC corrigendum October 2009: latest date text amended in A11 foreword

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English version

**Information technology equipment -
Safety
Part 22: Equipment installed outdoors
(IEC 60950-22:2005, modified)**

Matériels de traitement de l'information -
Sécurité
Partie 22: Matériels destinés
à être installés à l'extérieur
(CEI 60950-22:2005, modifiée)

Einrichtungen der Informationstechnik -
Sicherheit
Teil 22: Einrichtungen
für den Außenbereich
(IEC 60950-22:2005, modifiziert)

This European Standard was approved by CENELEC on 2005-12-01. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CENELEC member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the Central Secretariat has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

CENELEC

European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

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Foreword

The text of document 108/145/FDIS, future edition 1 of IEC 60950-22, prepared by IEC TC 108, Safety of electronic equipment within the field of audio/video, information technology and communication technology, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 60950-22 on 2005-12-01.

A draft amendment, prepared by the Technical Committee CENELEC/TC 108, Safety of electronic equipment within the fields of audio/video, information technology and communication technology, was submitted to the formal vote and was approved by CENELEC for inclusion in EN 60950-22 on 2005-12-01.

The following dates were fixed:

- latest date by which the EN has to be implemented
at national level by publication of an identical
national standard or by endorsement (dop) 2006-12-01
- latest date by which the national standards conflicting
with the EN have to be withdrawn (dow) 2008-12-01

This Part 22 of EN 60950 is intended to be used with EN 60950-1. The subclauses of EN 60950-1 apply as is reasonable. Where safety aspects are similar to those of Part 1, the relevant Part 1 clause or subclause is shown for reference in parentheses after the clause or subclause title in Part 22. Where a requirement in Part 22 refers to a requirement or criterion of Part 1, a specific reference to EN 60950-1 is made.

EN 60950 consists of the following parts, under the general title *Information technology equipment – Safety*:

- Part 1: General requirements;
- Part 21: Remote power feeding;
- Part 22: Equipment installed outdoors;
- Part 23: Large data storage equipment.

In this standard, the following print types are used:

- requirements proper and normative annexes: roman type;
- *compliance statements and test specifications: italic type;*
- notes in the text and in tables: smaller roman type;
- terms that are defined in Clause 2 and in EN 60950-1: SMALL CAPITALS.

Annexes ZA and ZB have been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 60950-22:2005 was approved by CENELEC as a European Standard with agreed common modifications.

Foreword to amendment A11

At the request of the Finnish, Norwegian and Swedish electrotechnical committees, a draft for an amendment to the European Standard EN 60950-22:2006 was submitted to the CENELEC members for acceptance in May 2008.

The text of the draft was accepted by CENELEC as amendment A11 to EN 60950-22:2006 on 2008-08-01.

The following dates were fixed:

- | | | |
|---|-------|------------|
| – latest date by which the existence of the amendment has to be announced at national level | (doa) | 2008-11-01 |
| – latest date by which the amendment has to be implemented at national level by publication of an identical national standard or by endorsement | (dop) | 2009-02-01 |
| – latest date by which national standards conflicting with the amendment have to be withdrawn | (dow) | 2009-02-01 |

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INTRODUCTION

This document proposes safety requirements for information technology equipment intended to be installed, when exposed wholly or partly, in a location where protection from the weather and other outdoor influences such as rain, dust, etc. normally provided by a building or other structure is limited or non-existent. There are many examples of information technology equipment in use throughout the world that are housed in special ENCLOSURES located on pavements, mounted on telecommunications poles and situated underground. Presently, IEC 60950 has no requirements for such equipment and this proposal would rectify this omission. The proposed requirements would not apply to portable or transportable equipment that may be occasionally used outdoors, but are not intended to be installed in conditions of inclement weather.

It is expected that IEC TC108 will continue to coordinate the output of its work with other technical committees dealing with equipment installed outdoors, such as IEC TC70 (Degrees of Protection by Enclosures, responsible for IEC 60529) and IEC TC48 (Electromechanical Components and Mechanical Structures for Electronic Equipment).

Annex E describes the rationale behind the treatment of specific safety aspects in this standard.

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INFORMATION TECHNOLOGY EQUIPMENT – SAFETY –

Part 22: Equipment to be installed outdoors

1 Scope

1.1 Equipment covered

This part of IEC 60950 applies to information technology equipment intended to be installed in an OUTDOOR LOCATION.

The requirements for OUTDOOR EQUIPMENT also apply, where relevant, to empty OUTDOOR ENCLOSURES supplied for housing information technology equipment to be installed in an OUTDOOR LOCATION.

1.2 Additional requirements

Each installation may have particular requirements. Some examples are given in 4.2. In addition, requirements for protection of the OUTDOOR EQUIPMENT against the effects of direct lightning strikes are not covered by the standard. For information on this subject, see IEC 61024-1.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 60068-2-11:1981, *Environmental testing – Part 2: Tests. Test Ka: Salt mist*

IEC 60364 (all parts), *Electrical installations of buildings*

IEC 60364-4-43:2001, *Electrical installations of buildings – Part 4-43: Protection for safety – Protection against overcurrent*

IEC 60529, *Degrees of protection provided by enclosures (IP Code)*

IEC 60950-1:2005, *Information technology equipment – Safety – Part 1: General requirements*

IEC 61643 (all parts), *Low-voltage surge protective devices*

ISO 178, *Plastics – Determination of flexural properties*

ISO 179 (all parts), *Plastics – Determination of Charpy impact strength*

ISO 180, *Plastics – Determination of Izod impact strength*

ISO 527 (all parts), *Plastics – Determination of tensile properties*

ISO 3231, *Paints and varnishes – Determination of resistance to humid atmospheres containing sulfur dioxide*

ISO 4628-3, *Paints and varnishes – Evaluation of degradation of coatings – Designation of quantity and size of defects, and of intensity of uniform changes in appearance – Part 3: Assessment of degree of rusting*

ISO 4892-1, *Plastics – Methods of exposure to laboratory light sources – General guidance*

ISO 4892-2, *Plastics – Methods of exposure to laboratory light sources – Xenon-arc sources*

ISO 4892-4, *Plastics – Methods of exposure to laboratory light sources – Open-flame carbon-arc lamps*

ISO 8256, *Plastics – Determination of tensile-impact strength*

ISO 18173:2005 *Non-destructive testing – General terms and definitions*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in IEC 60950-1 and the following apply.

3.1

OUTDOOR LOCATION

location for equipment where protection from the weather and other outdoor influences provided by a building or other structure is limited or non-existent

3.2

OUTDOOR EQUIPMENT

equipment specified by the manufacturer to be installed where exposed wholly or partly to the conditions in an OUTDOOR LOCATION

NOTE TRANSPORTABLE EQUIPMENT, for example, a laptop or notebook computer, or a telephone, is not OUTDOOR EQUIPMENT unless specified by the manufacturer for continuous use in an OUTDOOR LOCATION.

3.3

OUTDOOR ENCLOSURE

part of OUTDOOR EQUIPMENT that is exposed to the adverse conditions in an OUTDOOR LOCATION and that is intended to protect the interior of the equipment from those conditions

NOTE 1 An OUTDOOR ENCLOSURE can also perform the functions of one or more of the following: a FIRE ENCLOSURE; an ELECTRICAL ENCLOSURE; a MECHANICAL ENCLOSURE.

NOTE 2 A separate cabinet or housing into which the equipment is placed can provide the function of an OUTDOOR ENCLOSURE.