

**Häiresüsteemid. Osa 4:  
Elektromagnetiline ühilduvus.  
Tooteperekonna standard:  
Häiringukindluse nõuded tuletõrje,  
turva- ja sotsiaalhäiresüsteemide  
komponentidele**

Alarm systems - Part 4: Electromagnetic compatibility - Product family standard: Immunity requirements for components of fire, intruder and social alarm systems

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 50130-4:2001 sisaldab Euroopa standardi EN 50130-4:1995+A1:1998 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 16.04.2001 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 50130-4:2001 consists of the English text of the European standard EN 50130-4:1995+A1:1998.</p> <p>This document is endorsed on 16.04.2001 with the notification being published in the official publication of the Estonian national standardisation organisation.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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<p><b>Käsitlusala:</b></p> <p>This EMC product-family standard, for immunity requirements, applies to the components of the following alarm systems, intended for use in and around buildings in residential, commercial, light industrial and industrial environment: Intruder alarm systems, hold-up alarm systems, fire detection and fire alarm systems, social alarm systems, CCTV systems, for security applications, access control systems, for security applications.</p>	<p><b>Scope:</b></p> <p>This EMC product-family standard, for immunity requirements, applies to the components of the following alarm systems, intended for use in and around buildings in residential, commercial, light industrial and industrial environment: Intruder alarm systems, hold-up alarm systems, fire detection and fire alarm systems, social alarm systems, CCTV systems, for security applications, access control systems, for security applications.</p>
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**ICS** 13.310, 13.320, 29.020

**Võtmesõnad:** acceptability, electromagnetic compatibility, electrostatic discharge tests, fire detection systems, fire intruder, radio disturbances, testing conditions, tests, warning systems

ICS 13.320; 29.020

Descriptors: Warning systems, fire detection systems, fire intruder, electromagnetic compatibility, radio disturbances, tests, electrostatic discharge tests, testing conditions, acceptability

English version

**Alarm systems**  
**Part 4: Electromagnetic compatibility**  
**Product family standard: Immunity requirements for components of fire, intruder and social alarm systems**

Systèmes d'alarme  
Partie 4: Compatibilité  
électromagnétique  
Norme famille de produit: Prescriptions  
relatives à l'immunité des composants  
de systèmes de détection d'incendie,  
d'intrusion et d'alarme sociale

Alarmanlagen  
Teil 4: Elektromagnetische  
Verträglichkeit  
Produktfamiliennorm: Anforderungen an  
die Störfestigkeit von Anlageteilen für  
Brand- und Einbruchmeldeanlagen sowie  
Personen-Hilferufanlagen

This European Standard was approved by CENELEC on 1995-07-04. 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, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

**CENELEC**

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

**Central Secretariat: rue de Stassart 35, B - 1050 Brussels**

## Foreword

This European Standard was prepared by the CENELEC Technical Committee TC 79, Alarm systems, in cooperation with CEN Technical Committee TC 72, Fire detection and fire alarm systems.

This standard is part of the EN 50130 series of standards. This series of standards is intended to give the requirements applicable to alarm systems in general (e.g. the EMC immunity requirements, in this case). The following associated series of European standards are intended to give the other requirements (e.g. performance requirements), which are applicable to the specific types of alarm systems:

- EN 50131 Alarm systems - Intrusion alarm systems;
- EN 50132 Alarm systems - CCTV surveillance systems;
- EN 50133 Alarm systems - Access control systems;
- EN 50134 Alarm systems - Social alarm systems;
- EN 50135 Alarm systems - Hold-up alarm systems;
- EN 50136 Alarm systems - Alarm transmission systems;
- EN 50137 Alarm systems - Combined or integrated alarm systems;
- EN 54 Fire detection and fire alarm systems.

The draft of this standard was submitted to the CENELEC Unique Acceptance Procedure in October 1994 and was approved by CENELEC as EN 50130-4 on 1995-07-04.

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) 1996-07-01
- latest date by which the national standards conflicting  
with the EN have to be withdrawn (dow) 2001-01-01

During the transitional period starting on 1996-01-01 and ending on 2001-01-01, manufacturers shall either refer to the generic standards EN 50082-1 or EN 50082-2, or refer to the product family standard EN 50130-4 excluding conflicting national standards, or showing conformity to immunity requirements of apparatus used in alarm systems in the framework of the EMC Directive 89/336/EEC.

After 2001-01-01, EN 50130-4 will be the only standard which can be used.

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## 1 Scope

This EMC product-family standard, for immunity requirements, applies to the components of the following alarm systems, intended for use in and around buildings in residential, commercial, light industrial and industrial environments:

- Intruder alarm systems;
- Hold-up alarm systems;
- Fire detection and fire alarm systems;
- Social alarm systems;
- CCTV systems, for security applications;
- Access control systems, for security applications.

The tests and severities to be used are the same for indoor and outdoor applications of fixed, movable and portable equipment.

The levels do not cover extreme cases, which may occur in any location, but with an extremely low probability of occurrence, or in special locations close to powerful emitters (e.g. radar transmitters)

Equipment within the scope of this standard should be designed in order to operate satisfactorily in the environmental electromagnetic conditions of residential, commercial, light industrial and industrial environments. This implies particularly that it should be able to operate correctly within the conditions fixed by the electromagnetic compatibility levels for the various disturbances on the low voltage public supply system as defined by ENV 61000-2-2. The Immunity tests in this standard only concern the most critical disturbance phenomena.

For equipment using radio signalling, mains signalling or with connections to the public telephone system, additional requirements, from other standards specific to these signalling media, might apply. For the requirements applicable to radio links, reference should be made to the applicable ETSI standard, in accordance with the agreement between ETSI and CENELEC.

This standard does not specify basic safety requirements, such as protection against electrical shocks, unsafe operation, insulation coordination and related dielectric tests.

This standard does not cover EMC emission requirements. These are covered by other appropriate standards.

## 2 Normative references

This European Standard incorporates, by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies:

<u>IEC Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
-	-	Electromagnetic compatibility - Basic immunity standard - Conducted disturbances induced by radio-frequency fields - Immunity test	ENV 50141	1993
IEC 68-1	1988	Environmental testing - Part 1: General and guidance	EN 60068-1	1994
IEC 1000-2-2 (mod.)*)	1990	Electromagnetic compatibility (EMC) Part 2: Environment Section 2: Compatibility levels for low-frequency conducted disturbances and signalling in public low-voltage power supply systems	ENV 61000-2-2	1993
IEC 1000-4-2	1995	Part 4: Testing and measurement techniques Section 2: Electrostatic discharge immunity test	EN 61000-4-2	1995
IEC 1000-4-3	1995	Section 3: Radiated, radio-frequency, electromagnetic field immunity test	-	-
IEC 1000-4-4	1995	Section 4: Electrical fast transient/burst immunity test	EN 61000-4-4	1995
IEC 1000-4-5	1995	Section 5: Surge immunity test	EN 61000-4-5	1995
IEC 1000-4-11	1994	Section 11: Voltage dips, short interruptions and voltage variations immunity tests	EN 61000-4-11	1994
-	-	Radio Equipment and System (RES) General Electro-Magnetic Compatibility (EMC) for radio equipment	prETS 300339	March 1994

\*) The text of IEC 1000-2-2:1990 was adopted as the European Prestandard ENV 61000-2-2 with agreed common modifications to clause 7.