

**Häiresüsteemid.  
Häireedastussüsteemid ja -seadmed.  
Osa 2-1: Üldnõuded  
häireedastussüsteemidele**

Alarm systems - Alarm transmission systems and equipment - Part 2-1: General requirements for alarm transmission systems

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 50136-2-1:2002 sisaldab Euroopa standardi EN 50136-2-1:1998+A1:2001 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 18.12.2002 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 50136-2-1:2002 consists of the English text of the European standard EN 50136-2-1:1998+A1:2001.</p> <p>This document is endorsed on 18.12.2002 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 standard specifies the general requirements for alarm transmission equipment used in alarm transmission systems. This standard does not specify the equipment used to display the information at the alarm receiving centre or the installation of equipment. Additional requirements for specific types of alarm transmission equipment are given in separate documents as parts of this standard. This does not preclude the use of any alarm transmission equipment not covered by one of these specific documents, provided that it meets these general requirements.</p>	<p><b>Scope:</b></p> <p>This standard specifies the general requirements for alarm transmission equipment used in alarm transmission systems. This standard does not specify the equipment used to display the information at the alarm receiving centre or the installation of equipment. Additional requirements for specific types of alarm transmission equipment are given in separate documents as parts of this standard. This does not preclude the use of any alarm transmission equipment not covered by one of these specific documents, provided that it meets these general requirements.</p>
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**Võtmesõnad:** design, electromagnetic compatibility, electrostatic discharge tests, environmental tests, interfaces, marking, performance evaluation, performance tests, receivers, reliability, safety, specification, transmission, transmitters, warning systems

Descriptors: Warning systems, transmission, transmitters, receivers, specification, performance evaluation, design, interfaces, safety, reliability, performance tests, environmental tests, electrostatic discharge tests, electromagnetic compatibility, marking

English version

**Alarm systems - Alarm transmission systems and equipment**  
**Part 2-1: General requirements for alarm transmission equipment**

Systèmes d'alarme - Systèmes et  
équipements de transmission d'alarme  
Partie 2-1: Exigences générales pour  
équipements de transmission d'alarme

Alarmanlagen  
Alarmübertragungsanlagen  
und -einrichtungen  
Teil 2-1: Allgemeine Anforderungen  
an Alarmübertragungseinrichtungen

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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.

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**CENELEC**

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

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## Foreword

This European Standard was prepared by the Technical Committee CENELEC TC 79, Alarm systems.

The text of the draft was submitted to the Unique Acceptance Procedure and was approved by CENELEC as EN 50136-2-1 on 1997-07-01.

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) 1998-08-01
- latest date by which the national standards conflicting  
with the EN have to be withdrawn (dow) 2002-08-01

EN 50136 consists of the following parts, under the general title "Alarm systems - Alarm transmission systems and equipment":

- Part 1-1 General requirements for alarm transmission systems
  - Part 1-2 Requirements for systems using dedicated alarm paths
  - Part 1-3 Requirements for systems with digital communicators using the public switched telephone network
  - Part 1-4 Requirements for systems with voice communicators using the public switched telephone network
  - Part 2-1 General requirements for alarm transmission equipment
  - Part 2-2 Requirements for equipment used in systems using dedicated alarm paths
  - Part 2-3 Requirements for equipment used in systems with digital communicators using the public switched telephone network
  - Part 2-4 Requirements for equipment used in systems with voice communicators using the public switched telephone network
  - Part 3 Alarm transmission protocols (in preparation)
  - Part 4 Annunciation equipment (in preparation)
  - Part 5 (free)
  - Part 6 (free)
  - Part 7 Application guidelines (in preparation)
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## 1 Scope

This standard specifies the general requirements for alarm transmission equipment used in alarm transmission systems.

This standard does not specify the equipment used to display the information at the alarm receiving centre or the installation of equipment.

Additional requirements for specific types of alarm transmission equipment are given in separate documents as parts of this standard. This does not preclude the use of any alarm transmission equipment not covered by one of these specific documents, provided that it meets these general requirements.

## 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 (including amendments).

<u>Publication</u>	<u>Year</u>	<u>Title</u>
EN 50082-1		Electromagnetic compatibility - Generic immunity standard Part 1: Residential, commercial and light industry
EN 50131-1		Alarm systems - Intrusion systems Part 1: General requirements
EN 50136-1-1		Alarm systems - Alarm transmission systems and equipment Part 1-1: General requirements for alarm transmission systems
EN 50136-4		Part 4: Annunciation equipment
EN 55022		Limits and methods of measurement of radio disturbance characteristics of information technology equipment (emission) (CISPR 22)
EN 60950		Safety of information technology equipment (IEC 60950, modified)
IEC 60068-1		Environmental testing Part 1: General and guidance
IEC 60068-2-1	1974	Part 2: Tests - Tests A: Cold
+ IEC 60068-2-1A	1976	
+ A1	1983	
IEC 60068-2-2	1974	Part 2: Tests - Tests B: Dry heat
+ IEC 60068-2-2A	1976	
IEC 60068-2-3	1969	Part 2: Tests - Test Ca: Damp heat, steady state
IEC 60068-2-6	1982	Part 2: Tests - Test Fc: Vibration (sinusoidal)
IEC 60068-2-27	1987	Part 2: Tests - Test Ea and guidance: Shock
IEC 60068-2-30	1980	Part 2: Tests - Test Db and guidance: Damp heat, cyclic (12 + 12 hour cycle)
+ A1	1985	
IEC 60068-2-42	1982	Part 2: Tests - Test Kc: Sulphur dioxide test for contacts and connections
IEC 60068-2-52	1984	Part 2: Tests - Test Kb: Salt mist, cyclic (sodium chloride solution)
IEC 60068-2-56	1988	Part 2: Tests - Test Cb: Damp heat, steady state, primarily for equipment

<u>Publication</u>	<u>Year</u>	<u>Title</u>
IEC 60068-2-63	1991	Part 2: Test methods - Test Eg: Impact, spring hammer
IEC 60364	series	Electrical installations of buildings
IEC 60529		Degrees of protection provided by enclosure (IP Code)
IEC 60664	series	Insulation coordination for equipment within low-voltage systems
IEC 61000-4-2	1995	Electromagnetic compatibility
		Part 4: Testing and measurement techniques
		Section 2: Electrostatic discharge immunity test
IEC 61000-4-3	1995	Section 3: Radiated, radio-frequency, electromagnetic field immunity test
IEC 61000-4-4	1995	Section 4: Electrical fast transient/burst immunity test
CCITT Recommendation V24		
CCITT Recommendation V23		
CCITT Recommendation V31 bis		
CCITT Recommendation X24		

### **3 Object**

The object of this standard is to specify the general requirements for the performance, reliability and security and safety characteristics of equipment used in alarm transmission systems, to facilitate its compatibility with different types of alarm systems.

### **4 General considerations**

#### **4.1 Applicable standards**

If use is made of public networks, the relevant recommendations from ETSI, CCITT, CCIR, CEPT, etc. shall be applicable.

Where appropriate, equipment shall also meet local, national and European requirements and regulations for attachment to, establishment and termination of connection and transmission via public telephone and data networks and/or the regulations for transmission via the use of radio, power distribution system and cable TV distribution systems.

#### **4.2 System configuration**

The logical configuration of an alarm transmission system is as shown in figure 1, which is attached.

Depending upon the required reliability levels and alarm receiving centres operational features, various system configurations are possible.