

## **Alarm systems - Intrusion and hold-up systems -- Part 1: System requirements**

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Part 1: System requirements

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 50131-1:2006 sisaldab Euroopa standardi EN 50131-1:2006 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 14.12.2006 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 50131-1:2006 consists of the English text of the European standard EN 50131-1:2006.</p> <p>This document is endorsed on 14.12.2006 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>Käesolev standard sätestab nõuded sissetungimishäire süsteemidele, mis on paigaldatud hoonetes, kus kasutatakse ainuotstarbelisi või mitmeotstarbelisi juhtmestatud või juhtmeteta ühendusi. Standard ei sisalda nõudeid välistele sissetungimishäire süsteemidele. Need nõuded kehtivad samuti hoonesse paigaldatud sissetungimishäire süsteemide komponentidele, mis on tavaliselt paigaldatud hoone välistarindile.</p>	<p><b>Scope:</b></p> <p>This European Standard specifies the requirements for Intrusion and Hold-up Alarm Systems installed in buildings using specific or non-specific wired interconnections or wire-free interconnections. These requirements also apply to the components of an I&amp;HAS installed in a building which are normally mounted on the external structure of a building e.g. ancillary control equipment or warning devices. The standard does not include requirements for exterior I&amp;HAS.</p>
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**ICS 13.310**

**Võtmesõnad:** elektriseadmestik, hoiatussüsteemid, keskkond, klassifikatsioon, määratlused, ohutusseadmed, sissetungimisandur, spetsifikaadid, toimimise hindamine, tähistamine

English version

**Alarm systems -  
Intrusion and hold-up systems  
Part 1: System requirements**

Systèmes d'alarme -  
Systèmes d'alarme contre l'intrusion  
et les hold-up  
Partie 1: Exigences système

Alarmanlagen -  
Einbruch- und Überfallenmeldeanlagen  
Teil 1: Systemanforderungen

This European Standard was approved by CENELEC on 2006-04-04. 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.

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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 formal vote and was approved by CENELEC as EN 50131-1 on 2006-04-04.

This European Standard supersedes EN 50131-1:1997.

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) 2007-05-01
- latest date by which the national standards conflicting  
with the EN have to be withdrawn (dow) 2009-05-01

This standard is part of the EN 50131 series of European Standards and Technical Specifications “Alarm systems - Intrusion and hold-up systems”, written to include the following parts:

Part 1	System requirements
Part 2-2	Requirements for passive infrared detectors
Part 2-3	Requirements for microwave detectors
Part 2-4	Requirements for combined passive infrared and microwave detectors
Part 2-5	Requirements for combined passive infrared and ultrasonic detectors
Part 2-6	Requirements for opening contacts (magnetic)
Part 2-7 <sup>1)</sup>	Intrusion detectors - Glass break detectors
Part 3	Control and indicating equipment
Part 4	Warning devices
Part 5-3	Requirements for interconnections equipment using radio frequency techniques
Part 6	Power supplies
Part 7	Application guidelines
Part 8 <sup>1)</sup>	Security fog devices

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<sup>1)</sup> At draft stage.

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## Introduction

This European Standard applies to Intrusion and Hold-up Alarm Systems. The standard is also intended to apply to Intruder Alarm Systems which include only intrusion detectors and to Hold-up Alarm Systems which include only hold-up devices.

This European Standard is a specification for Intrusion and Hold-up Alarm Systems (I&HAS) installed in buildings, it includes four security grades and four environmental classes.

The purpose of an I&HAS is to enhance the security of the supervised premises. To maximise its effectiveness an I&HAS should be integrated with appropriate physical security devices and procedures. This is particularly important to higher grade I&HAS.

This standard is intended to assist insurers, intruder alarm companies, customers and the police in achieving a complete and accurate specification of the supervision required in particular premises, but it does not specify the type of technology, the extent or degree of detection, nor does it necessarily cover all of the requirements for a particular installation.

All references to the requirements for I&HAS refer to basic minimum requirements and the designers of such installed I&HAS should take into account the nature of the premises, the value of the contents, the degree of risk of intrusion, the threat to personnel and any other factors which may influence the choice of grade and content of an I&HAS.

Recommendations for design, planning, operation, installation and maintenance are given in Application Guidelines CLC/TS 50131-7.

This standard is not intended to be used for testing individual I&HAS components. Requirements for testing individual I&HAS components are given in the relevant component standards.

I&HAS and components thereof are graded to provide the level of security required. The security grades take into account the risk level which depends on the type of premises, the value of the contents, and the typical intruder or robber expected.

## 1 Scope

This European Standard specifies the requirements for Intrusion and Hold-up Alarm Systems installed in buildings using specific or non-specific wired interconnections or wire-free interconnections. These requirements also apply to the components of an I&HAS installed in a building which are normally mounted on the external structure of a building e.g. ancillary control equipment or warning devices. The standard does not include requirements for exterior I&HAS.

This standard specifies performance requirements for installed I&HAS but does not include requirements for design, planning, installation, operation or maintenance.

These requirements also apply to I&HAS sharing means of detection, triggering, interconnection, control, communication and power supplies with other applications. The operation of an I&HAS shall not be adversely influenced by other applications.

Requirements are specified for I&HAS components where the relevant environment is classified. This classification describes the environment in which an I&HAS component may be expected to operate as designed. When the requirements of the four environmental classes are inadequate, due to the extreme conditions experienced in certain geographic locations, special national conditions are given in Annex A. General environmental requirements for I&HAS components are described in Clause 7.

The requirements of this European Standard also apply to IAS and HAS when these systems are installed independently.

When an I&HAS does not include functions relating to the detection of intruders, the requirements relating to intrusion detection do not apply.

When an I&HAS does not include functions relating to hold-up, the requirements relating to hold-up do not apply.

NOTE Unless otherwise stated the abbreviation I&HAS is intended to also mean IAS and HAS.

## 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.

CLC/TS 50131-7	2003	Alarm systems – Intrusion systems – Part 7: Application guidelines
EN 50130-4	1995	Alarm systems – Part 4: Electromagnetic compatibility – Product family standard: Immunity requirements for components of fire, intruder and social alarm systems
EN 50130-5	1998	Alarm systems – Part 5: Environmental test methods
EN 50131-6	1997	Alarm systems – Intrusion systems – Part 6: Power supplies
EN 50136	series	Alarm systems – Alarm transmission systems and equipment
EN 60065	2002	Audio, video and similar electronic apparatus – Safety requirements (IEC 60065:2001, mod.)
EN 60073	2002	Basic and safety principles for man-machine interface, marking and identification – Coding principles for indicators and actuators (IEC 60073:2002)



EN 60950-1	2006	Information technology equipment – Safety – Part 1: General requirements (IEC 60950-1:2005, mod.)
EN 61000-6-3	2001	Electromagnetic compatibility (EMC) – Part 6-3: Generic standards – Emission standard for residential, commercial and light-industrial environments (CISPR/IEC 61000-6-3:1996, mod.)

### 3 Definitions and abbreviations

#### 3.1 Definitions

For the purposes of this document, the following terms and definitions apply:

##### 3.1.1

##### **action**

(relating to setting and unsetting) deliberate operation or act by the user which is part of the setting or unsetting procedure

##### 3.1.2

##### **access level**

level of access to particular functions of an I&HAS

##### 3.1.3

##### **active**

state of a detector in the presence of a hazard

##### 3.1.4

##### **active period**

period during which an alarm signal is present

##### 3.1.5

##### **alarm**

warning of the presence of a hazard to life, property or the environment

##### 3.1.6

##### **alarm receiving centre**

continuously manned centre to which information concerning the status of one or more I&HAS is reported

##### 3.1.7

##### **alarm company**

organisation which provides services for I&HAS

##### 3.1.8

##### **alarm condition**

condition of an I&HAS, or part thereof, which results from the response of the system to the presence of a hazard

##### 3.1.9

##### **alarm notification**

passing of an alarm condition to warning devices and/or alarm transmission systems

##### 3.1.10

##### **alarm system**

an electrical installation which responds to the manual or automatic detection of the presence of a hazard