# SLOVENSKI STANDARD
# SIST IEC 62642-1:2024

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**SIST IEC 60839-1-1:1995**
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**Alarmni sistemi - Sistemi za javljanje vloma in ropa - 1. del: Sistemske zahteve (IEC 62642-1:2010)**

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

**Ta slovenski standard je istoveten z:** **IEC 62642-1:2010**



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# INTERNATIONAL STANDARD

# NORME INTERNATIONALE

## 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



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INTERNATIONAL ELECTROTECHNICAL COMMISSION

# ALARM SYSTEMS – INTRUSION AND HOLD-UP SYSTEMS –

## Part 1: System requirements

## FOREWORD

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International Standard IEC 62642-1 has been prepared by IEC technical committee 79: Alarm and electronic security systems.

This standard is based on EN 50131-1 (2006) and its Amendment 1 (2009).

The text of this standard is based on the following documents:

| FDIS | Report on voting |
|---|---|
| 79/280/FDIS | 79/299/RVD |

Full information on the voting for the approval of this standard can be found in the report on voting indicated in the above table.

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

A list of all parts of the IEC 62642 series can be found, under the general title *Alarm systems – Intrusion and hold-up systems*, on the IEC website.

The committee has decided that the contents of this publication will remain unchanged until the stability result date indicated on the IEC web site under "http://webstore.iec.ch" in the data related to the specific publication. At this date, the publication will be

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

# INTRODUCTION

This standard is part of the IEC 62642 series of International Standards and Technical Specifications "*Alarm systems – Intrusion and hold-up systems*", written to include the following parts:

| | |
|---|---|
| Part 1 | System requirements |
| Part 2-2 | Intrusion detectors – Passive infrared detectors |
| Part 2-3 | Intrusion detectors – Microwave detectors |
| Part 2-4 | Intrusion detectors – Combined passive infrared / Microwave detectors |
| Part 2-5 | Intrusion detectors – Combined passive infrared / Ultrasonic detectors |
| Part 2-6 | Intrusion detectors – Opening contacts (magnetic) |
| Part 2-71 | Intrusion detectors – Glass break detectors – Acoustic |
| Part 2-72 | Intrusion detectors – Glass break detectors – Passive |
| Part 2-73 | Intrusion detectors – Glass break detectors – Active |
| 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 | Security fog devices |



This International Standard applies to Intrusion and Hold-up Alarm Systems (I&HAS). The standard is also intended to apply to Intruder Alarm Systems (IAS) which include only intrusion detectors and to Hold-up Alarm Systems (HAS) which include only hold-up devices.

This International Standard is a specification for Intrusion and Hold-up Alarm Systems 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 EN/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.

# ALARM SYSTEMS – INTRUSION AND HOLD-UP SYSTEMS –

## Part 1: System requirements

## 1 Scope

This part of IEC 62642 specifies the requirements for Intrusion and Hold-up Alarm Systems (I&HAS) 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 International 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 functioning of an I&HAS is not 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 function 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 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 also intended to 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.

IEC 60065:2001, *Audio, video and similar electronic apparatus – Safety requirements*

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

IEC 61000-6-3:2006, *Electromagnetic compatibility (EMC) – Part 6-3: Generic standards – Emission standard for residential, commercial and light-industrial environments*

IEC 62599-1:2010, *Alarm systems – Part 1: Environmental test methods*

IEC 62599-2:2010, *Alarm systems – Part 2: Electromagnetic compatibility – Immunity requirements for components of fire and security alarm systems*

EN/TS 50131-6:2008, *Alarm systems – Intrusion and hold-up systems – Part 6: Power supplies*[1]

EN 50136-1-1:1998, *Alarm systems – Alarm transmission systems and equipment – Part 1-1: General requirements for alarm transmission systems*

## 3 Terms, definitions and abbreviations

### 3.1 Terms and 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**
organization 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

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1 The transformation of this document as IEC 62642-6 is under consideration.