

**Alarm systems - Intrusion and hold-up systems --
Part 2-5: Requirements for combined passive
infrared and ultrasonic detectors**

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EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 50131-2-5:2008 sisaldab Euroopa standardi EN 50131-2-5:2008 ingliskeelset teksti.

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English version

**Alarm systems -
Intrusion and hold-up systems -
Part 2-5: Requirements for combined passive infrared
and ultrasonic detectors**

Systemes d'alarme -
Systemes d'alarme contre l'intrusion
et les hold-up -
Partie 2-5: Exigences pour detecteurs
combinés à infrarouges passifs
et ultrasoniques

Alarmanlagen -
Einbruch- und Überfallmeldeanlagen -
Teil 2-5: Anforderungen an kombinierte
Passiv-Infrarot- und Ultraschallmelder

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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.

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

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

Foreword

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This European Standard supersedes CLC/TS 50131-2-5:2004.

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) 2009-05-01
- latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 2011-05-01

EN 50131 will consist of the following parts, under the general title *Alarm systems – Intrusion and hold-up systems*:

- Part 1 System requirements
- Part 2-2 Intrusion detectors – 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 Intrusion detectors – Opening contacts (magnetic)
- Part 2-7-1 Intrusion detectors – Glass break detectors – Acoustic
- Part 2-7-2 Intrusion detectors – Glass break detectors – Passive
- Part 2-7-3 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

Contents

	Page
Introduction.....	5
1 Scope.....	6
2 Normative references	6
3 Definitions and abbreviations.....	6
3.1 Definitions	6
3.2 Abbreviations	7
4 Functional requirements	7
4.1 Event processing.....	7
4.2 Detection.....	9
4.3 Operational requirements	10
4.4 Immunity of the individual technologies to incorrect operation	10
4.5 Tamper security	11
4.6 Electrical requirements.....	12
4.7 Environmental classification and conditions.....	13
5 Marking, identification and documentation	13
5.1 Marking and/or identification.....	13
5.2 Documentation	13
6 Testing	14
6.1 Generalities.....	14
6.2 General test conditions.....	14
6.3 Basic detection test.....	15
6.4 Walk testing	16
6.5 Switch-on delay, time interval between signals and indication of detection	19
6.6 Self tests	19
6.7 Immunity of individual technologies to incorrect operation	20
6.8 Tamper security	21
6.9 Electrical tests.....	23
6.10 Environmental classification and conditions.....	25
6.11 Marking, identification and documentation.....	26
Annex A (normative) Dimensions & requirements of the standardised test magnets	27
Annex B (normative) General testing matrix	30
Annex C (informative) Walk test diagrams.....	31
Annex D (normative) Procedure for calculation of average temperature difference	34
Annex E (informative) Basic detection target for the basic test of detection capability	35
Annex F (informative) Equipment for walk test velocity control.....	36
Annex G (informative) Immunity to visible and near infrared radiation – Notes on calibration of the light source.....	37
Annex H (informative) Example list of small tools	38
Annex I (informative) Test for resistance to re-orientation of adjustable mountings	39
Bibliography.....	40

Figures

Figure A.1 – Test magnet - Magnet Type 1	28
Figure A.2 – Test magnet - Magnet Type 2	29
Figure C.1 – Detection across the boundary	31
Figure C.2 – Detection within the boundary.....	31
Figure C.3 – High velocity and intermittent movement.....	32
Figure C.4 – Close-in detection.....	32
Figure C.5 – Significant range reduction	33
Figure I.1 – Re-orientation test	39

Tables

Table 1 – Events to be processed by grade	8
Table 2 – Generation of signals or messages	8
Table 3 – General walk test velocity and attitude requirements	9
Table 4 – Tamper security requirements	12
Table 5 – Grade dependencies for electrical requirements.....	12
Table 6 – Range of materials for masking tests.....	23
Table 7 – Operational tests.....	25
Table 8 – Endurance tests	26
Table D.1 – Measurement and calculation of the real average temperature difference between the SWT and the background	34

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Introduction

This European Standard is for combined passive infrared and ultrasonic detectors (to be referred to as the detector) used as part of intrusion alarm systems installed in buildings. It includes four security grades and four environmental classes.

The purpose of a detector is to detect the broad spectrum infrared radiation emitted by an intruder and, at the same time, to emit ultrasonic radiation over the area being protected, and analyse signals that are returned, to provide the necessary range of signals or messages to be used by the rest of the intrusion alarm system.

The number and scope of these signals or messages will be more comprehensive for systems that are specified at the higher grades.

This European Standard is only concerned with the requirements and tests for the detector. Other types of detector are covered by other documents identified as EN 50131-2 series.

1 Scope

This European Standard is for combined passive infrared and ultrasonic detectors installed in buildings and provides for security grades 1 to 4 (see EN 50131-1), specific or non-specific wired or wire-free detectors, and uses environmental classes I to IV (see EN 50130-5). This standard does not include requirements for combined passive infra red and ultrasonic detectors intended for use outdoors.

A detector shall fulfil all the requirements of the specified grade.

Functions additional to the mandatory functions specified in this standard may be included in the detector, providing they do not influence the correct operation of the mandatory functions.

The European Standard does not apply to system interconnections.

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.

EN 50130-4	Alarm systems – Part 4: Electromagnetic compatibility – Product family standard: Immunity requirements for components of fire, intruder and social alarm systems
EN 50130-5	Alarm systems – Part 5: Environmental test methods
EN 50131-1	Alarm systems – Intrusion and hold-up systems – Part 1: System requirements
EN 50131-6	Alarm systems – Intrusion and hold-up systems – Part 6: Power supplies
EN 60068 series	Environmental testing (IEC 60068 series)
EN 60068-1	Environmental testing – Part 1: General and guidance (IEC 60068-1)
EN 60068-2-52	Environmental testing – Part 2: Tests – Test Kb: Salt mist, cyclic (sodium chloride solution) (IEC 60068-2-52)

3 Definitions and abbreviations

3.1 Definitions

For the purposes of this document, the following terms and definitions apply in addition to those given in EN 50131-1.

3.1.1

basic detection target

heat source and/or ultrasonic reflector designed to verify the operation of a detector

3.1.2

combined passive infrared and ultrasonic detector

detector of the broad-spectrum infrared radiation emitted by a human being, with an active ultrasonic emitter and receiver installed in the same housing