

**Alarm systems - Intrusion systems - Part 2-3:
Requirements for microwave detectors**

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

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English version

**Alarm systems -
Intrusion and hold-up systems -
Part 2-3: Requirements for microwave detectors**

Systèmes d'alarme -
Systèmes d'alarme contre l'intrusion
et les hold-up -
Partie 2-3: Exigences pour détecteurs
à hyperfréquences

Alarmanlagen -
Einbruch- und Überfallmeldeanlagen -
Teil 2-3: Anforderungen
an Mikrowellenmelder

This European Standard was approved by CENELEC on 2008-05-01. 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.

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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

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The following dates were fixed:

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with the EN have to be withdrawn (dow) 2011-05-01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

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Introduction

This standard deals with microwave 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 emit microwave radiation and analyse returned signals to detect an intruder and 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 specification 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 microwave 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 microwave 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 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 60068-1	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

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

3.1 Definitions

3.1.1

basic detection target

microwave reflector designed to verify the operation of a detector

3.1.2

incorrect operation

physical condition that causes an inappropriate signal or message from a detector

3.1.3

masking

interference with the detector input capability by the introduction of a physical barrier such as metal, plastics, paper or sprayed paints or lacquers in close proximity to the detector