IEC 62642-2-5

Edition 1.0 2010-12

# INTERNATIONAL STANDARD

# NORME INTERNATIONALE



## Alarm systems – Intrusion and hold-up systems – Part 2-5: Intrusion detectors – Combined passive infrared / Ultrasonic detectors

## Systèmes d'alarme – Systèmes d'alarme contre l'intrusion et les hold-up – Partie 2-5: Détecteurs d'intrusion – Détecteurs combinés à infrarouges passifs et à ultrasons



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# ALARM SYSTEMS – INTRUSION AND HOLD-UP SYSTEMS –

## Part 2-5: Intrusion detectors – Combined passive infrared / Ultrasonic detectors

## FOREWORD

1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as "IEC Publication(s)"). Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
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International Standard IEC 62642-2-5 has been prepared by IEC technical committee 79: Alarm and electronic security systems.

This standard is based on EN 50131-2-5 (2008).

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

| FDIS | Report on voting |
|---|---|
| 79/324/FDIS | 79/330/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.

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# INTRODUCTION

This part 2-5 of the IEC 62642 series of standards gives requirements for combined passive infrared and ultrasonic detectors used in intrusion and hold-up alarm systems. The other parts of this series of standards are as follows:

| | |
|---|---|
| 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/systems |

This 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 standard is only concerned with the requirements and tests for the detector. Other types of detector are covered by other documents identified as IEC 62642-2 series.