

# INTERNATIONAL STANDARD

## NORME INTERNATIONALE

**Alarm systems – Intrusion and hold-up systems –  
Part 5-3: Interconnections – Requirements for equipment using radio frequency  
techniques**

**Systèmes d'alarme – Systèmes d'alarme contre l'intrusion et les hold-up –  
Partie 5-3: Interconnexions – Exigences pour les équipements utilisant des  
techniques radio fréquence**





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Requirements for equipment using radio frequency techniques****FOREWORD**

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International Standard IEC 62642-5-3 has been prepared by IEC technical committee 79: Alarm and electronic security systems.

This standard is based on EN 50131-5-3 (2005).

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

FDIS	Report on voting
79/309/FDIS	79/320/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 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- withdrawn,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 part 5-3 of the IEC 62642 series of standards gives requirements for interconnections equipment using radio frequency techniques 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 Interconnections – Requirements for equipment using radio frequency techniques
- Part 6 Power supplies
- Part 7 Application guidelines
- Part 8 Security fog devices/systems

## ALARM SYSTEMS – INTRUSION AND HOLD-UP SYSTEMS –

### **Part 5-3: Interconnections – Requirements for equipment using radio frequency techniques**

#### **1 Scope**

This part of the IEC 62642 applies to intrusion alarm equipment using radio frequency (RF) links and located on protected premises. It does not cover long range radio transmissions.

This standard defines the terms used in the field of intrusion alarm equipment using radio frequency links as well as the requirements relevant to the equipment.

It is used in conjunction with the other parts of the IEC 62642 series that define the functional requirements of the equipment regardless of the type of interconnections used.

#### **2 Normative references**

None.

NOTE Reference to IEC 62642-1 appears only in a Note, as such the reference is indicated in a bibliography at the last page of the present document.

#### **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**

###### **alarm message**

message conveying information regarding intruder, tamper or fault alarms

###### **3.1.2**

###### **assigned band**

frequency band within which the equipment is authorized to operate

###### **3.1.3**

###### **attenuation**

degradation of the RF signal due to a change in the passive environment of the system after its installation (e.g. creation, relocation or reflection or absorption materials)

###### **3.1.4**

###### **collision**

simultaneous transmission from two or more RF communication devices belonging to the same system, of sufficient signal strength to cause corruption or obliteration of the RF signals

###### **3.1.5**

###### **collision rate**

probability of two or more messages having part or all of their information coincident on the RF link leading to a collision