



Fire detection and fire alarm systems

Part 25: Components using radio transmission paths

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Australian Standard[®]

Fire detection and fire alarm systems

**Part 25: Components using radio
transmission paths**

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PREFACE

This Standard was prepared by the Standards Australia Committee FP-002, Fire Detection, Warning, Control and Intercom Systems, to supersede AS 4428.9:2006, *Fire detection, warning, control and intercom systems—Control and indicating equipment, Part 9: Requirements for wire-free alarm zone circuits*.

The objective of this Standard is to specify requirements, test methods and performance criteria for components used in fire detection and alarm systems, installed in and around buildings, which use radio-frequency (r.f.) transmission paths.

This Standard is identical with, and has been reproduced from ISO 7240-25:2010, *Fire detection and fire alarm systems, Part 25: Components using radio transmission paths*.

As this Standard is reproduced from an International Standard, the following applies:

- (a) In the source text ‘this part of ISO 7240’ should read ‘this Australian Standard’.
- (b) A full point substitutes for a comma when referring to a decimal marker.

References to International Standards should be replaced by references to Australian or Australian/New Zealand Standards, as follows:

<i>Reference to International Standard</i>		<i>Australian Standard</i>	
ISO		AS	
7240	Fire detection and alarm systems	7240	Fire detection and alarm systems
7240-2	Part 2: Control and indicating equipment	7240.2	Part 2: Control and indicating equipment (ISO 7240-2:2003, MOD)
7240-4	Part 4: Power supply equipment	7240.4	Part 4: Power supply equipment (ISO 7240-4:2003, MOD)
IEC		AS	
60068	Environmental testing	60068	Environmental testing
60068-2-42	Part 2-42: Tests—Test Kc: Sulphur dioxide test for contacts and connections	60068.2.42	Part 2.42: Tests—Test Kc: Sulphur dioxide test for contacts and connections

Only normative references that have been adopted as Australian or Australian/New Zealand Standards have been listed.

The terms ‘normative’ and ‘informative’ have been used in this Standard to define the application of the annex to which they apply. A ‘normative’ annex is an integral part of a Standard, whereas an ‘informative’ annex is only for information and guidance.

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INTRODUCTION

This part of ISO 7240 is based on European Standard EN 54-25, prepared by the European Committee for Standardization, CEN/TC 72, *Fire detection and fire alarm systems*.

This part of ISO 7240 defines requirements and tests in addition to those in other parts of ISO 7240 that allow components of a fire detection and alarm system using radio transmission paths to operate with an integrity and stability similar to those of wire transmission paths.

This part of ISO 7240 includes both equipment and system requirements because of the integral relationship between equipment that forms the system.

Limitations to the use of radio components, such as capacity, can be specified in national rules or guidelines.

Technical aspects of the assessment of frequencies, bands and channels should be considered.

AUSTRALIAN STANDARD

Fire detection and fire alarm systems**Part 25:
Components using radio transmission paths****1 Scope**

This part of ISO 7240 specifies requirements, test methods and performance criteria for components used in fire detection and alarm systems, installed in and around buildings, which use radio-frequency (r.f.) transmission paths. It specifies requirements for the assessment of conformance of the components to the requirements of this part of ISO 7240.

Where components work together and this requires knowledge of the system design, this part of ISO 7240 also specifies requirements for the system.

When the fire detection and alarm system uses wired and r.f. transmission paths, the relevant parts of ISO 7240 apply together with this part of ISO 7240. Requirements relevant to wire transmission paths are superseded or modified by those included in this part of ISO 7240.

This part of ISO 7240 does not restrict

- the intended use of radio spectrum, e.g. frequency, power output of devices;
- the allowed maximum number of the components using r.f. transmission paths within the fire detection and alarm system or one wire transmission path and/or r.f. transmission path;
- the allowed maximum number of the components affected by loss of one wire transmission path and/or r.f. transmission path.

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.

ISO 7240-2, *Fire detection and alarm systems — Part 2: Control and indicating equipment*

ISO 7240-4, *Fire detection and alarm systems — Part 4: Power supply equipment*

ISO 7240-5:2003, *Fire detection and alarm systems — Part 5: Point-type heat detectors*

ISO 7240-11, *Fire detection and alarm systems — Part 11: Manual call points*

ISO 7240-18, *Fire detection and alarm systems — Part 18: Input/output devices*

IEC 60068-1, *Environmental testing — Part 1: General and guidance*

IEC 60068-2-1, *Environmental testing — Part 2-1: Tests — Test A: Cold*