

INTERNATIONAL STANDARD

NORME INTERNATIONALE

**Alarm and electronic security systems –
Part 5-3: Alarm transmission systems – Requirements for receiving centre
transceiver (RCT)**

**Systemes d'alarme et de sécurité électroniques –
Partie 5-3: Systemes de transmission d'alarme – Exigences pour les
transmetteurs du centre de réception (RCT)**



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**Alarm and electronic security systems –
Part 5-3: Alarm transmission systems – Requirements for receiving centre
transceiver (RCT)**

**Systèmes d’alarme et de sécurité électroniques –
Partie 5-3: Systèmes de transmission d’alarme – Exigences pour les
transmetteurs du centre de réception (RCT)**

INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

COMMISSION
ELECTROTECHNIQUE
INTERNATIONALE

ICS 13.320

ISBN 978-2-8322-3166-1

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INTERNATIONAL ELECTRICAL COMMISSION

ALARM AND ELECTRONIC SECURITY SYSTEMS –
Part 5-3: Alarm transmission systems –
Requirements for receiving centre transceiver (RCT)

FOREWORD

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International Standard IEC 60839-5-3 has been prepared by IEC technical committee 79: Alarm and electronic security systems.

This international standard is based on EN 50136-3:2013.

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

CDV	Report on voting
79/464/CDV	79/515/RVC

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 in the IEC 60839 series, published under the general title *Alarm and electronic security systems*, can be found 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 website 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- withdrawn,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

The object of this part of IEC 60839 is to specify the general requirements for the performance, reliability, resilience and security of alarm transmission systems and to ensure their suitability for use with different types of alarm systems and annunciation equipment.

An alarm transmission system may use any type of transmission network.

When the ATS functions are integrated into an alarm system or annunciation equipment the requirements of this standard apply.

The intended users of this international standard include alarm transmission service providers, alarm receiving centre operators, fire departments, insurance companies, telecommunication network operators, internet service providers, equipment manufacturers, alarm companies, end users and others.

The IEC 60839-5 series consists of the following parts, under the general title *Alarm and electronic security systems*:

- Part 5-1: Alarm transmission systems – General requirements;
- Part 5-2: Alarm transmission systems – Requirements for supervised premises transceiver (SPT);
- Part 5-3: Alarm transmission systems – Requirements for receiving centre transceiver (RCT);
- Part 5-4¹: (under evaluation);
- Part 5-5¹: (under evaluation);
- Part 5-6¹: (under evaluation);
- Part 5-7: (place holder).

¹ The former IEC 60839-5 series (1991) is being reviewed by an ad-hoc group set-up at the TC 79 meeting in Milano in October 2013. This ad-hoc group is in charge of evaluating the relevance / obsolescence of IEC 60839-5-4, IEC 60839-5-5 and IEC 60839-5-6 developed in 1991 and advise TC 79 on their future.

ALARM AND ELECTRONIC SECURITY SYSTEMS –

Part 5-3: Alarm transmission systems –

Requirements for receiving centre transceiver (RCT)

1 Scope

This part of IEC 60839 specifies the minimum equipment requirements for the performance, reliability, resilience, security and safety characteristics of the receiving centre transceiver (RCT) installed in an ARC and used in alarm transmission systems.

The alarm transmission system requirements and classifications are defined within IEC 60839-5-1. Different types of alarm systems may in addition to alarm messages also send other types of messages, e.g. fault messages and status messages. These messages are also considered to be alarm messages. The term alarm message is used in this broad sense throughout the document.

Where application specific standards exist, the RCT should comply with relevant standards called up by that application.

The RCT can be either an integrated element of any receiving/annunciation equipment, or a stand-alone device. In either case, the requirements of this international standard should apply.

The function of the RCT is to monitor the ATPs, receive alarm messages, forward alarm messages to one or more AEs and send acknowledgements to the SPTs.

This international standard specifies the minimum equipment requirements for the performance, reliability, resilience, security and safety characteristics of the receiving centre transceiver (RCT) installed in alarm receiving centres and to define parameters that are tested to ensure its compatibility with ATS categories.

Management of the transmission network is not in the scope of this international standard.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 60839-5-1:2014, *Alarm and electronic transmission systems – Part 5-1: Alarm transmission systems – General requirements*

IEC 62599-1, *Alarm systems – Part 1: Environmental test methods*

IEC 62599-2, *Alarm systems – Part 2: Electromagnetic compatibility – Immunity requirements for components of fire and security alarm systems*