

# INTERNATIONAL STANDARD

**IEC**  
**60839-7-4**

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## Alarm systems –

### Part 7-4:

### Message formats and protocols for serial data interfaces in alarm transmission systems – Common transport layer protocol

*Systèmes d'alarme –*

*Partie 7-4:*

*Formats de message et protocoles pour les interfaces de  
données série dans les systèmes de transmission d'alarme –  
Protocole de la couche commune de transport*



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## Alarm systems –

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# INTERNATIONAL ELECTROTECHNICAL COMMISSION

## ALARM SYSTEMS –

### Part 7-4: Message formats and protocols for serial data interfaces in alarm transmission systems – Common transport layer protocol

#### FOREWORD

- 1) The IEC (International Electrotechnical Commission) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of the 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, the IEC publishes International Standards. 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. The IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
- 2) The formal decisions or agreements of the IEC on technical matters express, as nearly as possible, an international consensus of opinion on the relevant subjects since each technical committee has representation from all interested National Committees.
- 3) The documents produced have the form of recommendations for international use and are published in the form of standards, technical specifications, technical reports or guides and they are accepted by the National Committees in that sense.
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- 5) The IEC provides no marking procedure to indicate its approval and cannot be rendered responsible for any equipment declared to be in conformity with one of its standards.
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International Standard IEC 60839-7-4 has been prepared by IEC technical committee 79: Alarm systems.

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

FDIS	Report on voting
79/201/FDIS	79/211/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 3.

Annex A forms an integral part of this standard.

The committee has decided that the contents of this publication will remain unchanged until 2004. At this date, the publication will be

- reconfirmed;
- withdrawn;
- replaced by a revised edition, or
- amended.

A bilingual version of this standard may be issued at a later date.

IEC 60839-7-4 forms one of a number of related parts presented under the general title: Alarm systems – Part 7: Message formats and protocols for serial data interfaces in alarm transmission systems:

- IEC 60839-7-1: General
- IEC 60839-7-2: Common application layer protocol
- IEC 60839-7-3: Common data link layer protocol
- IEC 60839-7-4: Common transport layer protocol
- IEC 60839-7-5: Alarm system interfaces employing a two-wire configuration in accordance with ISO/IEC 8482
- IEC 60839-7-6: Alarm system interfaces employing ITU-T Recommendation V.24/V.28 signalling
- IEC 60839-7-7: Alarm system interfaces for plug-in alarm system transceivers
- IEC 60839-7-11: Serial protocol for use by digital communicator systems using ITU-T Recommendation V.23 signalling at interfaces with the PSTN
- IEC 60839-7-12: PTT interfaces for dedicated communications using ITU-T Recommendation V.23 signalling
- IEC 60839-7-20: Terminal interfaces employing ITU-T Recommendation V.24/V.28 signalling

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## ALARM SYSTEMS –

### Part 7-4: Message formats and protocols for serial data interfaces in alarm transmission systems – Common transport layer protocol

#### 1 Scope

This part of IEC 60839 specifies the transport layer message structure, formats and transmission procedures to be used at standard interfaces in alarm transmission systems. This should be used at all such interfaces where equipment from one supplier is intended to inter-work with equipment from other suppliers, and where the underlying system architecture does not provide the necessary facilities to support the common application layer.

The structure follows the OSI recommendations for a layered protocol to allow flexibility in the choice and use of lower level transmission media and protocols, whilst maintaining support for the common application layer protocol.

This standard applies equally to the transmission of alarms and other messages to/from intrusion, fire, access control and social alarm systems, and to the transmission of information to/from other similar systems.

The physical management of the authentication keys required by this standard is not included.

#### 2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this part of IEC 60839. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this part of IEC 60839 are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. For undated references, the latest edition of the normative document referred to applies. Members of IEC and ISO maintain registers of currently valid International Standards.

IEC 60839-7-1, *Alarm systems – Part 7-1: Message formats and protocols for serial data interfaces in alarm transmission systems – General*

#### 3 Definitions

For the purpose of this part of IEC 60839, the definitions in IEC 60839-7-1 apply.

#### 4 Abbreviations

The abbreviations in IEC 60839-7-1 apply.