INTERNATIONAL STANDARD

IEC 60839-7-5

First edition
2001-03

Alarm systems –

Part 7-5:
Message formats and protocols for serial data interfaces in alarm transmission systems – Alarm system interfaces employing a two-wire configuration in accordance with ISO/IEC 8482

Systèmes d'alarme –

Partie 7-5:
Formats de message et protocoles pour les interfaces de données série dans les systèmes de transmission d'alarme – Interfaces de systèmes d'alarme utilisant une configuration bifilaire conforme à ISO/CEI 8482

Reference number
IEC 60839-7-5:2001(E)

Publication numbering

As from 1 January 1997 all IEC publications are issued with a designation in the 60000 series. For example, IEC 34-1 is now referred to as IEC 60034-1.

Consolidated editions

The IEC is now publishing consolidated versions of its publications. For example, edition numbers 1.0, 1.1 and 1.2 refer, respectively, to the base publication, the base publication incorporating amendment 1 and the base publication incorporating amendments 1 and 2.

Further information on IEC publications

The technical content of IEC publications is kept under constant review by the IEC, thus ensuring that the content reflects current technology. Information relating to this publication, including its validity, is available in the IEC Catalogue of publications (see below) in addition to new editions, amendments and corrigenda. Information on the subjects under consideration and work in progress undertaken by the technical committee which has prepared this publication, as well as the list of publications issued, is also available from the following:

- **IEC Web Site (www.iec.ch)**

- **Catalogue of IEC publications**

  The on-line catalogue on the IEC web site (www.iec.ch/catlg-e.htm) enables you to search by a variety of criteria including text searches, technical committees and date of publication. On-line information is also available on recently issued publications, withdrawn and replaced publications, as well as corrigenda.

- **IEC Just Published**

  This summary of recently issued publications (www.iec.ch/JP.htm) is also available by email. Please contact the Customer Service Centre (see below) for further information.

- **Customer Service Centre**

  If you have any questions regarding this publication or need further assistance, please contact the Customer Service Centre:

  Email: custserv@iec.ch
  Tel: +41 22 919 02 11
  Fax: +41 22 919 03 00

INTERNATIONAL STANDARD

IEC 60839-7-5

First edition
2001-03

Alarm systems –

Part 7-5:
Message formats and protocols for serial data interfaces in alarm transmission systems – Alarm system interfaces employing a two-wire configuration in accordance with ISO/IEC 8482

Systèmes d'alarme –

Partie 7-5:
Formats de message et protocoles pour les interfaces de données série dans les systèmes de transmission d'alarme – Interfaces de systèmes d'alarme utilisant une configuration bifilaire conforme à ISO/CEI 8482

International Electrotechnical Commission 3, rue de Varembé Geneva, Switzerland
Telefax: +41 22 919 0300 e-mail: inmail@iec.ch IEC web site http://www.iec.ch

Commission Electrotechnique Internationale
International Electrotechnical Commission
Международная Электротехническая Комиссия

INTERNATIONAL ELECTROTECHNICAL COMMISSION

ALARM SYSTEMS –

Part 7-5: Message formats and protocols for serial data interfaces in alarm transmission systems – Alarm system interfaces employing a two-wire configuration in accordance with ISO/IEC 8482

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.
4) In order to promote international unification, IEC National Committees undertake to apply IEC International Standards transparently to the maximum extent possible in their national and regional standards. Any divergence between the IEC Standard and the corresponding national or regional standard shall be clearly indicated in the latter.
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.
6) Attention is drawn to the possibility that some of the elements of this International Standard may be the subject of patent rights. The IEC shall not be held responsible for identifying any or all such patent rights.

International Standard IEC 60839-7-5 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
79/202/FDIS	79/212/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.

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 60839-7-5 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

ALARM SYSTEMS –

Part 7-5: Message formats and protocols for serial data interfaces in alarm transmission systems – Alarm system interfaces employing a two-wire configuration in accordance with ISO/IEC 8482

1 Scope

This part of IEC 60839 specifies the requirements for standard interfaces using a two-wire connection employing ISO/IEC 8482 signalling for use between the control and indicating equipment (CIE) of an alarm system and one or more alarm system transceivers connected to alarm transmission systems.

This standard provides a flexible interface allowing the connection of a single master CIE to a number of devices in accordance with ISO/IEC 8482 which may be alarm system transceivers or slave CIE.

This is required in order to ensure compatibility of equipment from different suppliers. The standard applies equally to the transmission of alarms and other messages to/from intrusion, fire and social alarm systems, and to the transmission of information to/from other similar systems.

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*

IEC 60839-7-2, *Alarm systems – Part 7-2: Message formats and protocols for serial data interfaces in alarm transmission systems – Common application layer protocol*

IEC 60839-7-3, *Alarm systems – Part 7-3: Message formats and protocols for serial data interfaces in alarm transmission systems – Common data link layer protocol*

IEC 60839-7-4, *Alarm systems – Part 7-4: Message formats and protocols for serial data interfaces in alarm transmission systems – Common transport layer protocol*

ISO/IEC 8482, *Information technology – Telecommunications and information exchange between systems – Twisted pair multipoint interconnections*

3 Definitions

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