

# TECHNICAL SPECIFICATION

**Alarm systems –  
Part 7-8: Message formats and protocols for serial data interfaces in alarm  
transmission systems – Requirements for common protocol for alarm  
transmission using the Internet protocol**



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IEC Central Office  
3, rue de Varembe  
CH-1211 Geneva 20  
Switzerland

Tel.: +41 22 919 02 11  
[info@iec.ch](mailto:info@iec.ch)  
[www.iec.ch](http://www.iec.ch)

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## Alarm systems –

**Part 7-8: Message formats and protocols for serial data interfaces in alarm transmission systems – Requirements for common protocol for alarm transmission using the Internet protocol**

INTERNATIONAL  
ELECTROTECHNICAL  
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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

## ALARM SYSTEMS –

**Part 7-8: Message formats and protocols for serial data interfaces in alarm transmission systems – Requirements for common protocol for alarm transmission using the Internet protocol**

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- the subject is still under technical development or where, for any other reason, there is the future but no immediate possibility of an agreement on an International Standard.

Technical specifications are subject to review within three years of publication to decide whether they can be transformed into International Standards.

IEC 60839-7-8, which is a technical specification, has been prepared by IEC technical committee 79: Alarm and electronic security systems.



The text of this technical specification is based on the following documents:

Enquiry draft	Report on voting
79/419/DTS	79/453A/RVDTS

Full information on the voting for the approval of this technical specification 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 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 web site under "<http://webstore.iec.ch>" in the data related to the specific publication. At this date, the publication will be

- transformed into an International Standard,
- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

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

## ALARM SYSTEMS –

### Part 7-8: Message formats and protocols for serial data interfaces in alarm transmission systems – Requirements for common protocol for alarm transmission using the Internet protocol

#### 1 Scope

This Part of IEC 60839 specifies a protocol for point-to-point transmission of alarms and faults, as well as communications monitoring, between a supervised premises transceiver and a receiving centre transceiver using the Internet protocol (IP).

The protocol is intended for use over any network that supports the transmission of IP data. These include Ethernet, xDSL, GPRS, WiFi, UMTS and WIMAX.

The system performance characteristics for alarm transmission are specified in IEC 60839-5-1.

The performance characteristics of the supervised premises equipment comply with the requirements of its associated alarm system standard and apply for transmission of all types of alarms including, but not limited to, fire, intrusion, access control and social alarms.

Compliance with this document is voluntary.

#### 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 security systems – Part 5-1: Alarm transmission systems – General requirements*

RFC 793:1981, *Internet standard – Transmission control protocol, DARPA Internet program, protocol specification*

NIST 800-38A:2001, *Recommendation for block cipher modes of operation: methods and techniques*

#### 3 Terms, definitions and abbreviations

##### 3.1 Terms and definitions

For the purposes of this document, the terms and definitions given in IEC 60839-5-1 apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at <http://www.electropedia.org/>
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