PD CLC/TS 50136-9:2020

BSI Standards Publication

Alarm systems — Alarm transmission systems and equipment

Part 9: Requirements for common protocol for alarm transmission using the Internet Protocol (IP)

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National foreword

This Published Document is the UK implementation of CLC/TS 50136-9:2020. It supersedes PD CLC/TS 50136-9:2017, which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee GW/1/5, Transmission equipment and networks.

A list of organizations represented on this committee can be obtained on request to its committee manager.

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

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English Version

Alarm systems - Alarm transmission systems and equipment - Part 9: Requirements for common protocol for alarm transmission using the Internet Protocol (IP)

Systèmes d'alarmes - Systèmes et équipements de transmission d'alarme - Partie 9 : Exigences pour le protocole commun de transmission d'alarme utilisant le protocole Internet (IP)

Alarmanlagen - Alarmübertragungsanlagen und -einrichtungen - Teil 9: Anforderungen an standardisierte Protokolle zur Alarmübertragung unter Nutzung des Internetprotokolls (IP)

This Technical Specification was approved by CENELEC on 2020-09-28.

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European Committee for Electrotechnical Standardization
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European foreword

This document (CLC/TS 50136-9:2020) has been prepared by CLC/TC 79 "*Alarm systems"*.

This document supersedes CLC/TS 50136-9:2017.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CENELEC shall not be held responsible for identifying any or all such patent rights.

This document specifies a common IP transport protocol for alarm transmission. The published version (2017, second version) required solving both technical and security issues identified during the first actual implementations of the protocol. The working group was working closely with the early adopters of the protocol and has a very clear and complete list of issues and solutions. This revision supersedes the previous version.

EN 50136 consists of the following parts, under the general title *Alarm systems - Alarm transmission systems and equipment*:

— *Part 1: General requirements for alarm transmission systems*

— *Part 2: General requirements for Supervised Premises Transceiver (SPT)*

— *Part 3: Requirements for Receiving Centre Transceiver (RCT)*

— *Part 4: Annunciation equipment used in alarm receiving centres*

— *Part 5: (Free)*

— *Part 6: (Free)*

— *Part 7: Application guidelines*

— *Part 8: (Free)*

— *Part 9: Requirements for a common protocol for alarm transmission using the Internet Protocol (IP)*

1 Scope

This document 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 EN 50136-1.

The requirements for the performance of the alarm transmission system, the SPT and the RCT are specified in the relevant parts of the EN 50136 series.

Compliance with this document is voluntary.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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.

EN 50136-1:2012, *Alarm systems - Alarm transmission systems and equipment - Part 1: General requirements for alarm transmission systems*

3 Terms, definitions and abbreviations

3.1 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 50136-1:2012 apply.

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

— ISO Online browsing platform: available at https://www.iso.org/obp

— IEC Electropedia: available at http://www.electropedia.org/

3.2 Abbreviations

For the purposes of this document, the following abbreviations apply.

AES Advanced Encryption Standard

ARC Alarm Receiving Centre

ATP Alarm Transmission Path

ATS Alarm Transmission System

CA X.509 Certificate Authority

CBC Cipher Block Chaining

CRC Cyclic redundancy check

DNS Domain Name System

DTLS Datagram Transport Layer Security

HL Header Length

IP Internet Protocol

IV Initialization Vector