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Standards

Irish Standard  
I.S. EN 50132-5-2:2011

# Alarm systems - CCTV surveillance systems for use in security applications -- Part 5-2: IP Video Transmission Protocols

## I.S. EN 50132-5-2:2011

*Incorporating amendments/corrigenda issued since publication:*

EN 50132-5-2:2011/AC:2012

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I.S. xxx: Irish Standard – national specification based on the consensus of an expert panel and subject to public consultation.

S.R. xxx: Standard Recommendation - recommendation based on the consensus of an expert panel and subject to public consultation.

SWiFT xxx: A rapidly developed recommendatory document based on the consensus of the participants of an NSAI workshop.

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Corrigendum to EN 50132-5-2:2011

English version

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1) In 3.1.145, delete "and derived from the" to read:

"

**3.1.145**  
**UPnP service template**

XML template listing action names, parameters for those actions, state variables, and the properties of those state variables, written in XML syntax

".

2) In 3.2, replace

"IETF Internet Engineering Task Force: standards body that forms Working Groups to"

with

"IETF Internet Engineering Task Force: standards body that forms Working Groups to develop specifications"

3) In 4.8 "Event handling", in the third paragraph, second sentence, replace "Appendix 0" with "Appendix A" to read:

"Consequently, this specification does not require particular notification topics, instead it defines a set of basic notification topics that an NVT is recommended to support, see Appendix A."

4) In 4.11, replace "/// overview description to be added ///" with "The definition of storage services such as replay control will be added in the next revision of this standard".

5) In 5.6, replace the last sentence with the following: "In addition any command can also be raised through a generic fault, see 5.11.2.2."

6) In Table 166, 6<sup>th</sup> row ("env:Sender"), last column, delete "The NVT SHOULD sthe NVT".

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English version

**Alarm systems -  
CCTV surveillance systems for use in security applications -  
Part 5-2: IP Video Transmission Protocols**

Systèmes d'alarme -  
Systèmes de surveillance CCTV à usage  
dans les applications de sécurité -  
Partie 5-2: Protocoles de Transmission de  
Vidéo d'IP

Alarmanlagen -  
CCTV-Überwachungsanlagen für  
Sicherungsanwendungen -  
Teil 5-2: IP Video Übertragung Protokolle

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**CENELEC**

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Comité Européen de Normalisation Electrotechnique  
Europäisches Komitee für Elektrotechnische Normung

**Management Centre: Avenue Marnix 17, B - 1000 Brussels**

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## Foreword

This document (EN 50132-5-2:2011) has been prepared by CLC/TC 79, Alarm systems.

The following dates are fixed:

- latest date by which this document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2012-10-31
- latest date by which the national standards conflicting with this document have to be withdrawn (dow) 2014-10-31

This document partially supersedes EN 50132-5:2001 and introduces the new video transmission methodology based on IP protocols into the standard series.

EN 50132 consists of the following parts, under the generic title "*Alarm systems – CCTV surveillance systems for use in security applications*":

Part 1	System requirements
Part 5-1	Video transmission – General Video Transmission Performance Requirements
Part 5-2	IP Video Transmission Protocols
Part 5-3	Video transmission – Analog and Digital Video Transmission
Part 7	Application guidelines

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

## **EN 50132-5-2:2011 (E)**

### **Introduction**

The European Electrotechnical Standardisation Organisation for Alarm Systems together with many governmental organisations, test houses and equipment manufacturers has defined a common framework for Surveillance Video Transmission in order to achieve interoperability between products.

This Video transmission standard is divided into 3 independent parts and sections:

Part 1: General video transmission performance requirements

Part 2: IP Video transmission protocols

Part 3: Analog and digital video transmission

Each part offers its own clauses on scope, references, definitions, requirements

The purpose of the transmission system in a closed circuit television (CCTV) installation is to provide reliable transmission of video signals between the different types of CCTV equipment in security, safety and monitoring applications.

Today CCTV surveillance systems reside in security networks using IT infrastructure, equipment and connections within the protected site itself.

This standard EN 50132-5-2 on network video ip protocol and interface definitions for video devices in surveillance applications is based on the general requirements for video transmission of EN 50132-5-1. Part 1 defines minimum IP connectivity requirements, basic video streaming, stream control, eventing, discovery and description functions, where this Part 2 is based on. Additionally Part 1 establishes minimum performance requirements, including interconnection, network video devices. EN 50132-7 Application Guidelines give guidance for Video Surveillance Installations in general, but takes special care of video ip networks. Any video transmission network should be designed in accordance with these standards. With prEN 50132-5-3 a detailed standard for non IP video transmission is defined. For signal and performance requirements on analog and uncompressed digital video transmission and interfaces this part 3 of the standard series shall be applied.

## 1 Scope

This European Standard introduces an IP network interface for devices in surveillance applications. In this part of the standard a network protocol is specified for the full interoperability of video devices. EN 50132-5-1 specifies the minimum network performance standards and general compliance to existing, well-known international network standards. On top of these basic layers protocols are defined to accomplish the full interoperability of video devices. In surveillance applications IP video devices have to use standardized protocols to accomplish following functionality: video streaming, stream control, event handling, discovery, capability description, device management, PTZ control, auxiliaries and other functions.

This European Standard consists of 3 sections. The first section defines protocol requirements to be fulfilled by any high-level IP video device interface.

The following two sections – Annex I and Annex II- define two alternative protocols, one is based on HTTP and REST services and the second is based on Web Services.

In the future a third high-level IP protocol may be defined in Annex III, which grants compatibility to the requirements of this standard series. Today no third IP video protocol implementation is available.

Some areas of this transmission standard are covered by more than one approach, e.g. UPnP, ZeroConf and WS-Discovery.

The network protocols recommended and defined by this Video Transmission Standard are selected with a sense for future relevance and further extensions.

Video transmission equipment may be combined with additional functions, e.g. for audio or metadata transmission.

## 2 Normative references

The following referenced documents are indispensable for the application 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 50132-1, *Alarm systems — CCTV surveillance systems for use in security applications — Part 1: System requirements*

EN 50132-5-1, *Alarm systems — CCTV surveillance systems for use in security applications — Part 5-1: Video transmission — General video transmission performance requirements*

EN 50132-7, *Alarm systems — CCTV surveillance systems for use in security applications — Part 7: Application guidelines*

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