



BSI Standards Publication

Event video data recorder for road vehicle accidents

Part 1: Basic requirements (IEC 63005-1:2017)

National foreword

This British Standard is the UK implementation of EN 63005-1:2017. It is identical to IEC 63005-1:2017.

The UK participation in its preparation was entrusted to Technical Committee EPL/100, Audio, video and multimedia systems and equipment.

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

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

© The British Standards Institution 2017
Published by BSI Standards Limited 2017

ISBN 978 0 580 95480 1

ICS 43.040.15; 33.160.40

Compliance with a British Standard cannot confer immunity from legal obligations.

This British Standard was published under the authority of the Standards Policy and Strategy Committee on 30 November 2017.

Amendments/corrigenda issued since publication

Date	Text affected
------	---------------

English Version

**Event video data recorder for road vehicle accidents - Part 1:
Basic requirements
(IEC 63005-1:2017)**

Enregistreurs de données vidéo pour l'identification et
l'analyse des causes des accidents des véhicules routiers -
Partie 1: Exigences de bases
(IEC 63005-1:2017)

Ereignis Video Daten Recorder für Unfälle von
Straßenfahrzeugen - Teil 1: Generelle Anforderungen
(IEC 63005-1:2017)

This European Standard was approved by CENELEC on 2017-09-13. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CENELEC member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.



European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

European foreword

The text of document 100/2839/CDV, future edition 1 of IEC 63005-1, prepared by Technical Area 17 "Multimedia systems and equipment for cars" of IEC/TC 100 "Audio, video and multimedia systems and equipment" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 63005-1:2017.

The following dates are fixed:

- latest date by which this document has (dop) 2018-06-13
to be implemented at national level by
publication of an identical national
standard or by endorsement
- latest date by which the national (dow) 2020-09-13
standards conflicting with this
document have to be withdrawn

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.

Endorsement notice

The text of the International Standard IEC 63005-1:2017 was approved by CENELEC as a European Standard without any modification.

In the official version, for Bibliography, the following note has to be added for the standard indicated:

IEC 62133	NOTE	Harmonized as EN 62133.
-----------	------	-------------------------

Annex ZA (normative)

Normative references to international publications with their corresponding European publications

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.

NOTE 1 Where an International Publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

NOTE 2 Up-to-date information on the latest versions of the European Standards listed in this annex is available here: www.cenelec.eu.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60068-2-1	2007	Environmental testing - Part 2-1: Tests - Test A: Cold	EN 60068-2-1	2007
IEC 60068-2-6	-	Environmental testing - Part 2-6: Tests - Test Fc: Vibration (sinusoidal)	EN 60068-2-6	-
IEC 60068-2-27	2008	Environmental testing - Part 2-27: Tests - Test Ea and guidance: Shock	EN 60068-2-27	2009
ISO 12233	-	Photography - Electronic still picture imaging - Resolution and spatial frequency responses		-

This page deliberately left blank

CONTENTS

FOREWORD.....	4
INTRODUCTION.....	6
1 Scope.....	7
2 Normative references	7
3 Terms and definitions	7
4 Abbreviated terms and symbols	8
5 Types of EVDR.....	9
5.1 Classification by security level	9
5.2 Classification by interoperability of functions.....	9
6 Functional requirements	10
6.1 Basic functions of the EVDR for road vehicle accidents	10
6.2 Types of event data	10
6.2.1 General	10
6.2.2 Mandatory event data	11
6.2.3 Optional event data	12
6.3 Power supply unit and electrical safety	13
6.3.1 Main power.....	13
6.3.2 Fuse	13
6.3.3 Protection from power failure	13
7 General requirements	13
7.1 Performance for storing acceleration.....	13
7.2 Physical structure	13
7.2.1 General	13
7.2.2 Input interface	14
7.3 Video camera performance	14
7.3.1 Basic camera performance	14
7.3.2 Camera FOV	14
7.3.3 Vehicle registration plate detection performance.....	14
7.4 Data storage and security	14
7.5 Environmental reliability tests	14
7.5.1 General	14
7.5.2 Low-temperature operation test	14
7.5.3 Operation at high-temperature	14
7.5.4 High temperature storage test.....	15
7.5.5 Vibration test	15
7.5.6 Mechanical shock test	15
Annex A (informative) Test setup for horizontal and vertical FOV	16
Annex B (informative) Assignment of product identification number	17
Annex C (normative) Registration plate identification of the camera.....	18
Bibliography.....	19
Figure 1 – Standard coordinate system of a vehicle equipped with the EVDR (body fixed coordinates)	9
Figure 2 – Basic functions of the EVDR for road vehicle accidents.....	10
Figure A.1 – Test setup for horizontal and vertical FOV (front view)	16

Figure A.2 – Test setup for horizontal and vertical FOV (plan view)	16
Figure C.1 – License plate identification test using the ISO 12233 resolution chart	18
Figure C.2 – ISO 12233 resolution chart	18
Table 1 – Types of event data	11
Table 2 – Mandatory event data items	11
Table 3 – Optional event data items	12
Table 4 – Operating voltage of EVDR under test	13
Table 5 – Vibration condition	15
Table 6 – Shock condition	15
Table B.1 – Assignment of product identification number	17