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INTERNATIONAL STANDARD



**Car Multimedia systems and equipment for vehicles – Drive monitoring
Surround view system –
Part 3: Measurement methods**

INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

CAR MULTIMEDIA SYSTEMS AND EQUIPMENT FOR VEHICLES – DRIVE MONITORING SURROUND VIEW SYSTEM –

Part 3: Measurement methods

FOREWORD

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IEC 63033-3 has been prepared by technical area 17: Multimedia systems and equipment for vehicles, of IEC technical committee 100: Audio, video and multimedia systems and equipment. It is an International Standard.

This second edition cancels and replaces the first edition published in 2019. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

- a) updates to the text and the title to reflect the change of the scope of the IEC 63033 series.

The text of this International Standard is based on the following documents:

Draft	Report on voting
100/3734/FDIS	100/3753/RVD

Full information on the voting for its approval can be found in the report on voting indicated in the above table.

The language used for the development of this International Standard is English.

A list of all parts in the IEC 63033 series, published under the general title *Multimedia systems and equipment for vehicles – Surround view system*, can be found on the IEC website.

This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at www.iec.ch/members_experts/refdocs. The main document types developed by IEC are described in greater detail at www.iec.ch/standardsdev/publications.

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INTRODUCTION

This document specifies measurement methods for the ~~drive monitoring~~ surround view system specified in IEC ~~TS~~ 63033-1:2017, which also specifies the model for generating the surrounding visual image of a ~~drive monitoring~~ surround view system. The system allows drivers to monitor the car's perimeter in real time by using "free eye point" technology, which allows drivers to dynamically change the viewing perspective to obtain the most appropriate views according to the driving situation.

CAR MULTIMEDIA SYSTEMS AND EQUIPMENT FOR VEHICLES – DRIVE MONITORING SURROUND VIEW SYSTEM –

Part 3: Measurement methods

1 Scope

This document specifies measurement methods for the ~~drive monitoring~~ surround view system specified in IEC ~~TS 63033-1:2017~~.

2 Normative references

The following documents are referred to in the text in such a way that ~~any~~ 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.

~~IEC TS 63033-1:2017, Car multimedia system and equipment – Drive monitoring system – Part 1: General~~

IEC 63033-1:2022, *Multimedia systems and equipment for vehicles – Surround view system – Part 1: General*

ISO 16505:2019, *Road vehicles – Ergonomic and performance aspects of Camera Monitor Systems – Requirements and test procedures*

UN Regulation No. 46, *Uniform provisions concerning the approval of devices for indirect vision and of motor vehicles with regards to the installation of these devices*

UN Regulation No. 125, *Uniform provisions concerning the approval of motor vehicles with regards to the forward field of vision of the motor vehicle driver*

INTERNATIONAL STANDARD

NORME INTERNATIONALE



**Multimedia systems and equipment for vehicles – Surround view system –
Part 3: Measurement methods**

**Systèmes et équipements multimédias pour véhicules – Système de vision
panoramique –
Partie 3: Méthodes de mesurage**



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INTERNATIONAL ELECTROTECHNICAL COMMISSION

MULTIMEDIA SYSTEMS AND EQUIPMENT FOR VEHICLES – SURROUND VIEW SYSTEM –

Part 3: Measurement methods

FOREWORD

- 1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of 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, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as “IEC Publication(s)”). 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. IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
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- a) updates to the text and the title to reflect the change of the scope of the IEC 63033 series.

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INTRODUCTION

This document specifies measurement methods for the surround view system specified in IEC 63033-1, which also specifies the model for generating the surrounding visual image of a surround view system. The system allows drivers to monitor the car's perimeter in real time by using "free eye point" technology, which allows drivers to dynamically change the viewing perspective to obtain the most appropriate views according to the driving situation.

MULTIMEDIA SYSTEMS AND EQUIPMENT FOR VEHICLES – SURROUND VIEW SYSTEM –

Part 3: Measurement methods

1 Scope

This document specifies measurement methods for the surround view system specified in IEC 63033-1.

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.

IEC 63033-1:2022, *Multimedia systems and equipment for vehicles – Surround view system – Part 1: General*

ISO 16505:2019, *Road vehicles – Ergonomic and performance aspects of Camera Monitor Systems – Requirements and test procedures*

UN Regulation No. 46, *Uniform provisions concerning the approval of devices for indirect vision and of motor vehicles with regards to the installation of these devices*

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COMMISSION ÉLECTROTECHNIQUE INTERNATIONALE

SYSTÈMES ET ÉQUIPEMENTS MULTIMÉDIAS POUR VÉHICULES – SYSTÈME DE VISION PANORAMIQUE –

Partie 3: Méthodes de mesurage

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Cette seconde édition annule et remplace la première édition parue en 2019. Cette édition constitue une révision technique.

Cette édition inclut les modifications techniques majeures suivantes par rapport à l'édition précédente:

- a) mises à jour du texte et du titre afin de refléter la modification du domaine d'application de la série IEC 63033.

Le texte de cette Norme internationale est issu des documents suivants:

Projet	Rapport de vote
100/3734/FDIS	100/3753/RVD

Le rapport de vote indiqué dans le tableau ci-dessus donne toute information sur le vote ayant abouti à son approbation.

La langue employée pour l'élaboration de cette Norme internationale est l'anglais.

Une liste de toutes les parties de la série IEC 63033, publiées sous le titre général *Systèmes et équipements multimédias pour véhicules – Système de vision panoramique*, se trouve sur le site web de l'IEC.

Ce document a été rédigé selon les Directives ISO/IEC, Partie 2, il a été développé selon les Directives ISO/IEC, Partie 1 et les Directives ISO/IEC, Supplément IEC, disponibles sous www.iec.ch/members_experts/refdocs. Les principaux types de documents développés par l'IEC sont décrits plus en détail sous www.iec.ch/standardsdev/publications.

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INTRODUCTION

Le présent document spécifie les méthodes de mesurage du système de vision panoramique spécifié dans l'IEC 63033-1, qui spécifie également le modèle utilisé pour générer l'image visuelle environnante du système de vision panoramique. Ce système permet aux conducteurs de surveiller le périmètre autour du véhicule en temps réel en utilisant la technologie "yeux libres", ce qui permet aux conducteurs de modifier de manière dynamique le point de vue afin d'obtenir les vues les plus appropriées en fonction de la situation de conduite.

SYSTÈMES ET ÉQUIPEMENTS MULTIMÉDIAS POUR VÉHICULES – SYSTÈME DE VISION PANORAMIQUE –

Partie 3: Méthodes de mesurage

1 Domaine d'application

Le présent document spécifie les méthodes de mesurage pour le système de vision panoramique spécifié dans l'IEC 63033-1.

2 Références normatives

Les documents suivants sont cités dans le texte de sorte qu'ils constituent, pour tout ou partie de leur contenu, des exigences du présent document. Pour les références datées, seule l'édition citée s'applique. Pour les références non datées, la dernière édition du document de référence s'applique (y compris les éventuels amendements).

IEC 63033-1:2022, *Systèmes et équipements multimédias pour véhicules – Système de vision panoramique – Partie 1: Généralités*

ISO 16505:2019, *Véhicules routiers – Aspects ergonomiques et de performance des caméras embarquées – Exigences et procédures d'essai*

Règlement n° 46 de l'ONU, *Prescriptions uniformes relatives à l'homologation des systèmes de vision indirecte et des véhicules à moteur en ce qui concerne le montage de ces systèmes*

Règlement n° 125 de l'ONU, *Prescriptions uniformes relatives à l'homologation des véhicules à moteur en ce qui concerne le champ de vision du conducteur des véhicules à moteur*