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**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

COMMISSION
ELECTROTECHNIQUE
INTERNATIONALE

ICS 33.160.60; 43.040.10; 43.040.15

ISBN 978-2-8322-1095-2

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CONTENTS

| | |
|---|----|
| FOREWORD..... | 3 |
| INTRODUCTION..... | 5 |
| 1 Scope..... | 6 |
| 2 Normative references | 6 |
| 3 Terms, definitions and abbreviated terms | 6 |
| 3.1 Abbreviated terms..... | 6 |
| 4 System model..... | 6 |
| 5 Camera image quality..... | 7 |
| 5.1 Camera resolution..... | 7 |
| 5.2 Camera image quality | 7 |
| 6 Camera calibration | 7 |
| 6.1 General..... | 7 |
| 6.2 Verification..... | 7 |
| 7 Field of view | 9 |
| 8 Time behaviour..... | 9 |
| 8.1 Start-up time | 9 |
| 8.2 Frame rate | 9 |
| 8.3 Latency..... | 10 |
| Annex A (informative) Field of view (FOV) | 11 |
| Bibliography..... | 17 |
| Figure 1 – System model of surround view system..... | 7 |
| Figure 2 – Orthogonal reference | 8 |
| Figure 3 – Reference guidance lines..... | 9 |
| Figure A.1 – Example view for class I FOV | 11 |
| Figure A.2 – Example view for class II FOV | 12 |
| Figure A.3 – Example view for class III FOV | 13 |
| Figure A.4 – Example view for class IV FOV | 13 |
| Figure A.5 – Example view for class V FOV | 14 |
| Figure A.6 – Example view for larger FOV on the passenger side | 14 |
| Figure A.7 – Example view for class VI FOV | 15 |
| Figure A.8 – Example view for FOV defined in 5.4.1 of UN REGULATION No. 125 | 16 |

INTERNATIONAL ELECTROTECHNICAL COMMISSION

**MULTIMEDIA SYSTEMS AND EQUIPMENT FOR VEHICLES –
SURROUND VIEW SYSTEM –****Part 3: Measurement methods**

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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 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.

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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*

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*

3 Terms, definitions and abbreviated terms

No terms and definitions are provided in this document.

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

- IEC Electropedia: available at <http://www.electropedia.org/>
- ISO Online browsing platform: available at <http://www.iso.org/obp>

3.1 Abbreviated terms

FOV – field of view

4 System model

A surround view system shall generate multiple camera composite images and/or single camera images, using cameras that are mounted on the outside the car. The system model of the surround view system is described in Figure 1. The views to be generated by this system shall capture the fields of view specified in Clause 7. This system shall generate multiple views according to the fields of view to be secured. For measurement methods, the system shall refer to ISO 16505 and UN Regulation No. 46. However, the system itself does not need to comply with ISO 16505 and UN Regulation No. 46.