



International
Standard

ISO 23150-15

**Road vehicles — Logical interface
between sensors and data fusion
unit for automated driving
functions —**

**Part 15:
Microphone specific interfaces**

*Véhicules routiers — Interface logique entre capteurs et unité de
fusion de données pour les fonctions de conduite automatisée —*

Partie 15: Interfaces spécifiques de microphone

**First edition
2026-06**

Sample Document

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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization. The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO document should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see <http://www.iso.org/directives>).

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This document was prepared by Technical Committee ISO/TC 22, *Road vehicles*, Subcommittee SC 31, *Data communication*.

This first edition of ISO 23150-15, together with ISO 23150-1 [1], ISO 23150-2 [2], ISO 23150-11 [3], ISO 23150-12 [4], ISO 23150-13 [5], ISO 23150-14 [6] and ISO 23150-20 [7], cancels and replaces ISO 23150:2023, which has been technically revised.

The main changes are as follows:

- reorganisation of the document structure; use of generic interfaces, generic signals, generic profiles and terms and definitions defined in ISO 23150-1 [1] as a basis for this document;
- specific collection of interfaces in separated documents; in this document specific collection of all technology specific interfaces for microphone;
- new logical interfaces for microphone detections.

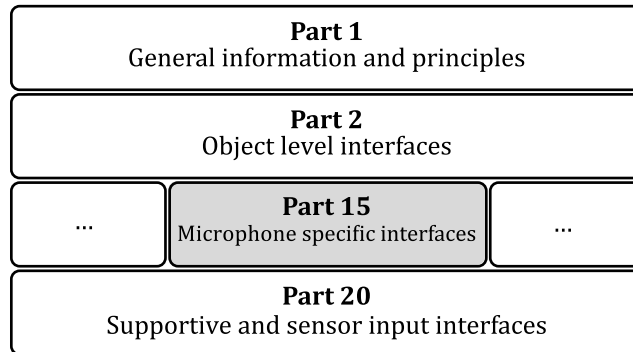
A list of all parts in the ISO 23150 series can be found on the ISO website.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

Introduction

Vehicle environmental perception sensors (single sensor or sensor cluster) provide logical interfaces according to the ISO 23150 series to the fusion unit or automated driving functions. The fusion unit generates a surround model and interprets the scene around the vehicle based on the sensor data. Interfaces are defined on different levels and described in a modular and semantic representation. The interfaces on feature level, advanced detection level and detection level are technology specific and differ by each technology.

[Figure 1](#) shows the schematic and contextual relationships between the documents relating to logical interfaces of the ISO 23150 series.



Key



scope of this document

Figure 1 — Relationship of the ISO 23150 series

This document specifies technology specific interfaces for microphone sensors as well as sensor clusters. The interfaces are based on the generic specifications of the interfaces in ISO 23150-1 [\[1\]](#). This document references the generic specifications of signals for the interface header, the generic interface levels and the profiles.

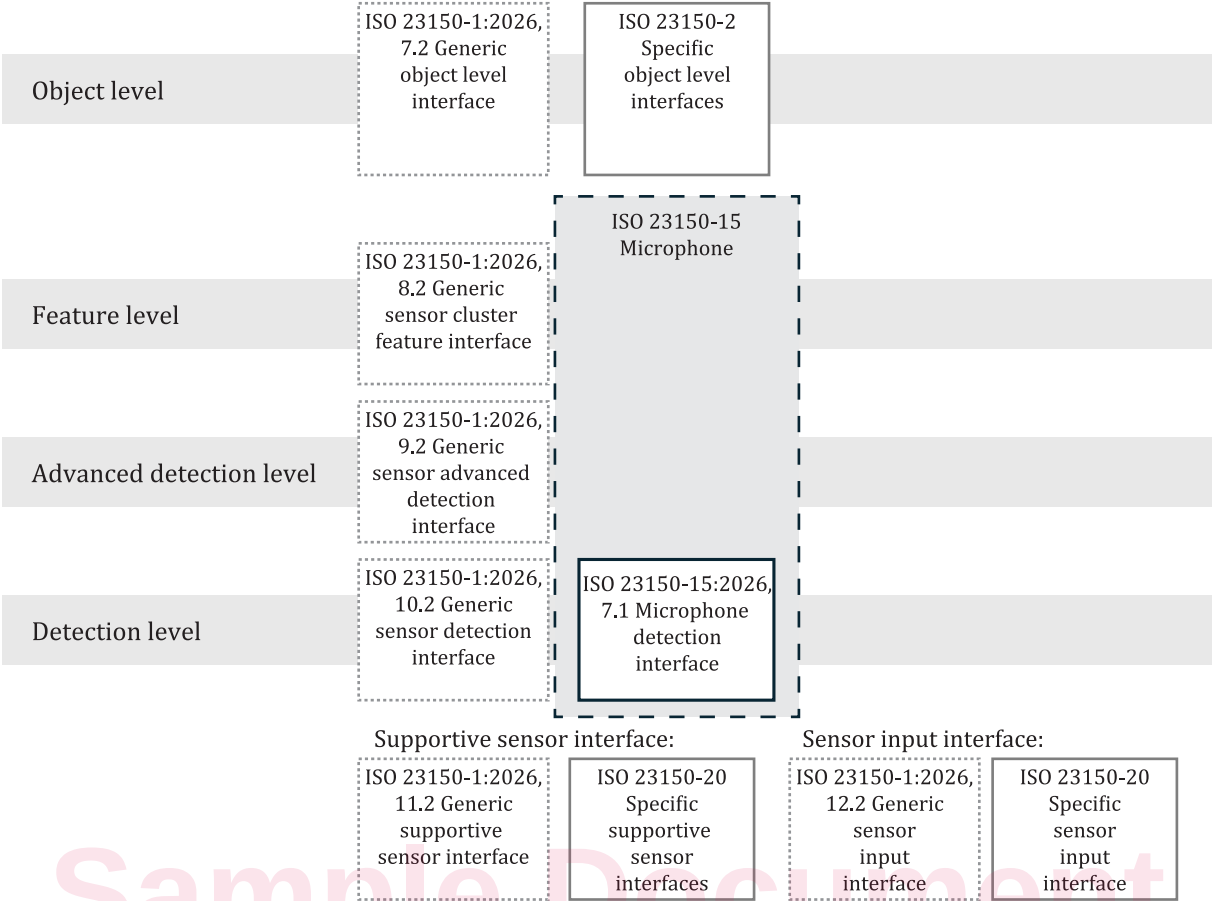
A microphone sensor or sensor cluster may also implement (provide or receive) logical interfaces:

- on object level (see ISO 23150-2 [\[2\]](#));
- for additional interfaces as supportive sensor interfaces and sensor input information interfaces (see ISO 23150-20 [\[7\]](#)).

This document is not intended to replace the logical interface specifications of other documents in the ISO 23150 series.

This document is based on the generic specifications in ISO 23150-1 [\[1\]](#) as shown in [Figure 2](#):

- generic sensor cluster feature interface;
- generic sensor advanced detection interface;
- generic sensor detection interface;
- general level-independent profiles.



Key



scope of this document

Figure 2 — Interfaces in the scope of this document and the related interfaces of the ISO 23150 series

Road vehicles — Logical interface between sensors and data fusion unit for automated driving functions —

Part 15: Microphone specific interfaces

1 Scope

This document is applicable to road vehicles with automated driving functions and specifies the technology-specific logical interfaces for microphone sensors or sensor clusters:

- feature level interface;
- advanced detection level interface;
- detection level interface.

This document does not provide electrical and mechanical interface specifications. Raw data interfaces are also excluded.

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.

ISO 23150-1, *Road vehicles — Logical interface between sensors and data fusion unit for automated driving functions — Part 1: General information and principles*

ISO 23150-1:2026, *Road vehicles — Logical interface between sensors and data fusion unit for automated driving functions — Part 1: General information and principles*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 23150-1 apply.

ISO and IEC maintain terminology 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>

4 Abbreviated terms

For the purposes of this document, the abbreviated terms given in ISO 23150-1 and the following apply.