

INTERNATIONAL STANDARD

NORME INTERNATIONALE

Radio data system (RDS) – Receiver products and characteristics – Methods of measurement

Système de radiodiffusion de données – Caractéristiques et méthodes de mesure des récepteurs RDS



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INTERNATIONAL ELECTROTECHNICAL COMMISSION

**RADIO DATA SYSTEM (RDS) –
RECEIVER PRODUCTS AND CHARACTERISTICS –
METHODS OF MEASUREMENT**

FOREWORD

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International Standard IEC 62634 has been prepared by technical area 1, Terminals for audio, video and data services and content, of IEC technical committee 100: Audio, video and multimedia systems and equipment.

International Standard IEC 62634 cancels and replaces IEC 60315-9, published in 1996, and constitutes a technical revision.

This edition includes the following significant technical changes with respect to IEC 60315-9:

- use of state-of-the-art measuring methods based on today's RDS products,
- provision of realistic performance targets,
- is complementary to RDS standard IEC 62106 (2009),
- it covers the challenging RDS receiving conditions "weak signal", "adjacent channel" and "strong signal" to verify the required RDS sensitivity and selectivity for three different RDS product categories.

The text of this standard is based on the following documents:

FDIS	Report on voting
100/1813/FDIS	100/1850/RVD

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

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

The committee has decided that the contents of this publication will remain unchanged until the stability date indicated on the IEC web site under "<http://webstore.iec.ch>" in the data related to the specific publication. At this date, the publication will be

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INTRODUCTION

This International Standard gives commonly agreed measuring methods to complement the RDS standard IEC 62106 (2009) and the RBDS standard (NRSC-4-A) in the USA.

The RDS measuring methods presented here are directed at all manufacturers of RDS receiver products, and in particular tuner modules with embedded RDS functionality, including TMC (see ISO 14819 series of standards).

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RADIO DATA SYSTEM (RDS) – RECEIVER PRODUCTS AND CHARACTERISTICS – METHODS OF MEASUREMENT

1 Scope

This International Standard describes how to measure minimum RDS receiver performance requirements which concern three RDS receiver product categories. However, it should be noted that there are also RDS receiver products on the market that significantly out-perform the minimum RDS receiver performance requirements quoted.

Methods and algorithms to achieve automatic programme service-following by means of AF lists are, however, very customer- and manufacturer-specific, and are therefore not covered in this standard.

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.

IEC 62106:2009, *Specification of the radio data system (RDS) for VHF/FM sound broadcasting in the frequency range from 87,5 MHz to 108,0 MHz*

3 Terms, definitions and abbreviations

3.1 Terms and definitions

For the purpose of this document, the following terms and definitions apply.

3.1.1

RDS product category 1

RDS receiver product with high-ohmic input impedance (e.g. for portable devices)

3.1.2

RDS product category 2

RDS receiver product with 50 Ω input impedance (e.g. car radio optimized for active antenna)

3.1.3

RDS product category 3

RDS receiver product with 75 Ω input impedance (e.g. car radio optimized for rod antenna or home receiver)

3.1.4

RDS reception

the signal at which the RDS signal is received with 50 % non-corrected error-free blocks; in practice, the level at which the TP bit is immediately detected

3.1.5

large signal behaviour

capability of the RDS receiver to fulfil its function at or in the neighbourhood of strong FM signals