

# INTERNATIONAL STANDARD

## NORME INTERNATIONALE

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

**Système de radiodiffusion de données (RDS) – Récepteurs et caractéristiques – Méthodes de mesure**



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IEC Central Office  
3, rue de Varembe  
CH-1211 Geneva 20  
Switzerland

Tel.: +41 22 919 02 11  
Fax: +41 22 919 03 00  
[info@iec.ch](mailto:info@iec.ch)  
[www.iec.ch](http://www.iec.ch)

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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 contents, of IEC technical committee 100: Audio, video and multimedia systems and equipment.

This second edition cancels and replaces the first edition published in 2011. This edition constitutes a technical revision.

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

- the  $\pm 100$  kHz test measurement case from Clause 8 of IEC 62634:2011 was deleted as it did not permit to achieve stable and reproducible measurement results;
- an error has been corrected. The term "de-emphasis" shall read correctly "pre-emphasis".

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

CDV	Report on voting
100/2121/CCDV	100/2419/RVC

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 website under "<http://webstore.iec.ch>" in the data related to the specific publication. At this date, the publication will be

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

## INTRODUCTION

This International Standard gives commonly agreed measuring methods to complement the RDS standard IEC 62106 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 documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 62106, *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 purposes of this document, the following terms and definitions apply. Terms and definitions of the RDS features used shall be found in IEC 62106.

#### 3.1.1

##### **RDS product category 1**

RDS receiver product with high-ohmic input impedance

EXAMPLE For portable devices.

#### 3.1.2

##### **RDS product category 2**

RDS receiver product with 50  $\Omega$  input impedance

EXAMPLE Car radio optimized for active antenna.

#### 3.1.3

##### **RDS product category 3**

RDS receiver product with 75  $\Omega$  input impedance

EXAMPLE 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

Note 1 to entry: In practice, the level at which the TP bit is immediately detected.