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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 16611-2017

Replacing GB/T 16611-1996; GB/T 18120-2000

**General specification for radio data transmission transceiver
(English Translation)**

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Foreword

This standard was drafted in accordance with the rules given in GB/T 1.1-2009.

This standard supersedes GB/T 16611-1996 "General Specification for Radio Stations" and GB/T 18120-2000 "Selection of Calls and Calls for Mobile Communications".

Data Equipment Measurement Methods." the main changes from this standard compared with GB/T 16611-1996 are as follows.

---Instead of the term "digital radio", the term "wireless data transmission transceiver"; modified and added some terms and definitions (1996) Chapter 3 of the Year Edition; Chapter 3 of this edition);

--- Modified classification (Chapter 4 of the 1996 edition; Chapter 4 of this edition);

--- Cancellation of specific regulations on call performance (Chapter 5 of the 1996 edition, relevant contents of Chapters 6 and 7);

--- Cancellation of "Feature Frequency Tolerance," "Data Interface Level," and "General Digital Transmission Performance" indicator requirements and methods of measurement (1996 edition) 5.4.2, 5.4.4, 6.4.2.7 and 6.4.4 related content);

- Cancellation of reliability and test method provisions (1996 version 5.8 and 6.8);
- Revised the names and definitions of some indicator items (Chapter 5 and Chapter 6 of the 1996 edition; Chapters 5 and 6 of this edition);
- Revised some indicator requirements (Chapter 5 of the 1996 edition; Chapter 5 of this edition);
- Modify the test method for some indicators (Chapter 6 of the 1996 edition; Chapter 6 of this edition);
- Increased the test method when using a self-contained antenna (see Chapter 6);
- Increased electrostatic discharge test requirements (see 5.5);
- Added "Impulse Noise Tolerance" indicator definition and measurement method (see Appendix B);
- Modify the "Multipath Propagation Conditions Sensitivity" indicator definition and measurement methods (1996 version 6.4.3.2.1; this edition of Appendix C);
- Added definitions and measurement methods for the "Stray and Radiated Spurious Component" indicator (see Appendix D).

The main changes from this standard to GB/T 18120-2000 are as follows.

- Deleted a detailed description of the test conditions and measuring equipment (Chapter 4 to Chapter 6 of the 2000 edition, Appendix A to Appendix D);
- Contains and modifies the definition and measurement methods of related indicator items (Chapter 7 of the 2000 edition; Chapters 5 and 6 of this edition).

This standard uses the redrafted method to refer to IEC 60489-6:1999 "Measuring methods for wireless equipment in the mobile service Part 6. Data design Prepared to prepare, and the degree of consistency with IEC 60489-6:1999 is not equivalent.

1 Scope

This standard specifies the technical requirements, test methods and quality assessment procedures for wireless data transmission transceivers (hereinafter referred to as data transmission machines).

And signs, packaging, transportation and storage requirements.

This standard applies to all types of symbols used for ground, inland or coastal special data communication networks (such as telemetry, remote control, remote signaling, remote adjustment systems, etc.) Combined with the following data transfer machine.

- a) The operating frequency is between 25MHz~1000MHz;

- b) constant envelope narrowband modulation;
- c) The carrier power is not more than 50W;
- d) use a binary serial data interface to connect to data terminal equipment;
- e) The transmitted data signal is a bit stream or a string of characters.

Other relevant radio data communication equipment can refer to implementation.

2 Normative references

The following documents are indispensable for the application of this document. For dated references, only dated versions apply to this article. For undated references, the latest version (including all amendments) applies to this document.

GB/T 2828.1-2012 Count sampling inspection procedures Part 1. Batch inspection sampling based on AQL plan GB/T 2829-2002 Periodic Inspection Count Sampling Procedures and Tables (Applicable to Inspection of Process Stability) GB 4943.1-2011 Information technology equipment safety - Part 1. General requirements GB/T 6107-2000 Interface between data terminal equipment and data circuit termination equipment using serial binary data exchange GB/T 12192-1990 FM radio frequency telephone transmitter measurement method GB/T 12193-1990 FM radio frequency telephone receiver measurement method GB/T 14013-1992 Mobile Communication Equipment Transport Package GB/T 15844-2017 General specifications for FM transceivers for mobile communications GB/T 17626.2-2006 Electromagnetic compatibility test and measurement techniques Electrostatic discharge immunity test ITU-T V-series recommends data communication over the telephone network

3 Terms and definitions

The following terms and definitions apply to this document.

Wireless data transmission transceiver radiodata transmission transceiver the radio transceivers used for data signal transmission purposes are also commonly referred to as data radio stations, and are referred to as data transmission machines for short.

Note: Some types of wireless data transmission transceivers are also sometimes referred to as radio modems, data transmission modules, etc.

Number compatible with data/speech compatible the data transmission machine has a digital transmission (data transmission) function and a call (voice transmission) function.