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CCS M04



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

GB/T 13619-2009

Replacing GB/T 13619-1992

Interference calculation methods for digital radio-relay systems

数字微波接力通信系统干扰计算方法

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Foreword

This standard replaces GB/T 13619-1992 "microwave relay system interference calculation method." This standard compared with GB/T 13619-1992 main changes are as follows:

- Delete the original standard on all parts of the analog microwave;
- Updated to allow value-system interference and bit error rate calculation of relevant content;
- Updated calculation portion of the transmission loss;
- Added Appendix B. The Standard Appendix A, Appendix B is an informative annex. This standard by the National Standardization Technical Committee on Radio Interference (SAC/TC79) and focal points. This standard was drafted. SRMC. The main drafters of this standard. Tan Haifeng, Lijing Chun, Liu Bin, ZHOU Xing-guo, Huang Biao, Jin This standard replaces the standards previously issued as follows:
 - GB/T 13619-1992. Digital microwave relay systems interference calculation method

1 Scope

GB/T 13619-2009 is the Chinese national standard on interference calculation methods for digital radio-relay systems, in the field of telecommunications and audio-video engineering. The /T suffix marks it as a recommended standard: it is not compulsory by itself, but it becomes binding as soon as a contract, a tender or a customer specification calls it up - which in practice is how most foreign buyers meet it. It was issued on 5 May 2009 by the General Administration of Quality Supervision, Inspection and Quarantine of the People's Republic of China; Standardization Administration of China, and has been in force since 1 July 2010. Classification: ICS 33.100, CCS M04. This page is published from the official record of the standard held by the Chinese standards administration: the identification, the dates, the classification and the issuing body are taken from there. The clause text, the tables and the numeric limits are in the document itself, which is delivered complete in English translation.

This standard gives the interference tolerance digital microwave relay communication

system, the type of interference and interference calculation methods. This standard applies to between 1GHz ~ 40GHz band, digital microwave relay systems and radar systems for digital microwave radio relay Interfere with communications systems computing. This standard is interference between digital microwave communication system mainly based on coordination and checking instruments, digital microwave communication system is generally provided Design, construction and maintenance basis.

2 Normative references

The following documents contain provisions which, through reference in this standard and become the standard terms. For dated references, subsequent Amendments (not including errata content) or revisions do not apply to this standard, however, encourage the parties to the agreement are based on research Whether the latest versions of these documents. For undated reference documents, the latest versions apply to this standard. YD/T 5088-2005 SDH microwave relay systems engineering

3 Terms and Definitions

The following terms and definitions apply to this standard.

- 3.1 Within an expected range of frequency stability, the same interference signal and the useful signal carrier frequency or interference generated when similar.
- 3.2 Since the adjacent channel sideband overwrite each other to produce interference.
- 3.3 Interfering station or interfering station antenna main beam central axis direction deviation angle between two stations connection (see Figure 9).
- 3.4 Due to selective RF and IF circuits, adjacent channel unwanted sideband attenuation in digital microwave systems.
- 3.5 Digital microwave channel a set of consecutive bits, each bit in the channel belongs to a block.
- 3.6 When one or more than one bit error occurs in a block, the block is called the block error.
- 3.7 In the 1s time, if there is one or more than one error block is said to sec errored seconds.