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

GB/T 17737.122-2018

**Coaxial communication cables -- Part 1-122: Electrical test
methods -- Test for crosstalk between coaxial cables**

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Foreword

GB/T 17737 "Coaxial Communication Cable" has or plans to issue the following parts.

- Part 1. General rules, definitions and requirements;
- Part 1-100. General requirements for electrical test methods;
- Part 1-101 . Electrical test methods Conductor direct current resistance test ;
- Part 1-102 . Electrical test methods ; Insulation resistance test of dielectrics for cables ;
- Part 1-103 . Electrical test methods Capacitance test of cables ;
- Part 1-104 . Electrical test methods ; Capacitance stability test of cables ;
- Part 1-105. Electrical test methods for withstand voltage test of cable dielectrics;
- Part 1-101 . Electrical test methods Voltage withstand test of cable sheathing ;
- Part 1-107 . Electrical test methods Vibrating cable charge level (mechanically induced noise) test;
- Part 1-108. Electrical test methods Characteristic impedance, phase delay, group delay, electrical length and propagation speed test;
- Part 1-110 . Electrical test method continuity ;
- Part 1-111 . Electrical test methods Stability test for phase constants ;
- Part 1-112. Electrical test methods Return Loss (Impedance Consistency) test;
- Part 1-113 . Electrical test method attenuation constant test ;
- Part 1-114 . Electrical test methods Inductors ;
- Part 1-115. Electrical test method impedance uniformity (pulse/step function return loss) test;

--- Part 1-116 . Electrical test methods TDR method measuring characteristic impedance ;

--- Part 1-119 . Electrical test methods RF power rating ;

--- Part 1-122. Electrical test methods - Cross-talk test between coaxial cables;

This part is part 1-122 of GB/T 17737.

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

This section uses the translation method equivalent to the use of IEC 61196-1-122.2006 "coaxial communication cable Part 1-122. Electrical test methods

Coaxial cable crosstalk test."

The Chinese documents that have a consistent correspondence with the normatively quoted international documents in this section are as follows.

---GB/T 17737.1-2013 Coaxial telecommunication cables Part 1. General specifications General, definitions and requirements (IEC 61196-1. 2005, IDT).

This section made the following editorial changes.

--- For the convenience of use, number the formula.

1 Scope

This part of GB/T 17737 applies to coaxial communication cables. It stipulates that the crosstalk test between the coaxial cables used in the communication system

law. This method is suitable for cross-talk measurements between coaxial cables of the same type, but it is also applicable to different types of cables (eg different sizes, impedances,

Speed ratio, etc.). This method is also suitable for multi-coaxial or integrated cables. Appendix A gives the theoretical basis for cross-talk measurement between coaxial cables.

2 Normative references

The following documents are indispensable for the application of this document. For dated references, only dated versions apply to this article

Pieces. For undated references, the latest version (including all amendments) applies to this document.

IEC 61196-1 Coaxial Communication Cables Part 1. Generic Specification General, Definitions and Requirements (Coaxialcommunicationca-

bles-Part 1.GenericSpecification-General,definitionsandrequirements)

3 Terms and definitions

The terms and definitions defined by IEC 61196-1 apply to this document.

4.1 Equipment

The measuring device is shown in Figure 1 and consists of the following components.

--- Signal generator. The characteristic impedance should be the same as the tested cable. Or with an impedance adapter. When the crosstalk attenuation is large, power should be used

The amplifier completes.

--- Receiver with Corrected Step Attenuator. For high cross-talk attenuation, use a pre-amplifier if necessary.

--- or network analyzer (including generator and receiver).

--- Load resistance. The impedance is equal to the nominal impedance of the cable being tested.