



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

**GB/T 17737.801-2022**

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**Coaxial communication cables - Part 8-1: Blank detail  
specification for semi-flexible cables with  
polytetrafluoroethylene(PTFE) dielectric**

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100 (all parts)]

200 (all parts)]

300 (all parts)]

### foreword

This document is in accordance with the provisions of GB/T 1.1-2020 "Guidelines for Standardization Work Part 1. Structure and Drafting Rules of Standardization Documents" drafted.

This document is part 8 of GB/T 17737 "Coaxial Communication Cables". GB/T 17737 has published the following parts.

--- Part 1. General Specifications General Principles, Definitions and Requirements.

\* Part 1-100. General Requirements for Electrical Test Methods;

\* Part 1-101. Electrical test method Conductor DC resistance test;

\* Part 1-102. Electrical test method Cable dielectric insulation resistance test;

\* Part 1-103. Electrical test method Capacitance test of cables;

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\* Part 1-105. Electrical test methods for the withstand voltage test of cable media;

\* Part 1-106. Electrical test methods for the withstand voltage test of cable jackets;

\* Part 1-107. Electrical Test Methods Cable Microphonic Charge Level (Mechanical Induced Noise) Test;

\* Part 1-108. Electrical Test Methods Characteristic Impedance, Phase Delay, Group Delay, Electrical Length and Propagation Velocity Tests;

\* Part 1-112. Electrical Test Methods Return Loss (Impedance Consistency) Test;

\* Part 1-115. Electrical Test Methods Impedance Uniformity (Pulse/Step Function Return

Loss) Test;

- \* Part 1-122.Electrical test methods for crosstalk between coaxial cables;
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- \* Part 1-310.Mechanical test methods for torsional properties of copper-clad metals;
- \* Part 1-313.Mechanical Test Methods for Adhesion of Media and Sheathing;
- \* Part 1-314.Mechanical test methods for bending test of cables;
- \* Part 1-316.Mechanical test method Maximum tensile force test of cables;
- \* Part 1-317.Mechanical Test Methods Cable Compression Test;
- \* Part 1-318.Mechanical Test Methods Thermal Performance Test;
- \* Part 1-324.Mechanical Test Methods Cable Abrasion Test;
- \* Part 1-325.Mechanical test methods Wind-induced vibration test.
- Part 2.Polytetrafluoroethylene (PTFE) insulated semi-rigid radio frequency coaxial cable sub-specification;
- Part 3.Sub-specification for coaxial cables for local area networks;
- Part 4.Sub-specification for leaky cables;
- Part 5.Sub-specification for trunk and distribution cables for CATV;
- Part 8.PTFE insulated semi-flexible cable sub-specification.
- \* Part 8-1.Blank detail specification for PTFE insulated semi-flexible cables;

This document uses the redrafted method to modify the use of IEC 61196-8-1.2012

"Coaxial Communication Cables Part 8-1.Polytetrafluoroethylene Insulation

Blank Detail Specification for Edge Semi-Flexible Cables.

The structure of this document has been adjusted compared to IEC 61196-8-1.2012.Due to

the addition of Chapter 3 in accordance with the requirements of GB/T 1.1-2020

"Terms and Definitions", resulting in the extension of subsequent chapter numbers.

The technical differences between this document and IEC 61196-8-1.2012 and their reasons are as follows.

--- Regarding normative reference documents, this document has made adjustments with technical differences to adapt to the technical conditions of our country and the adjustment situation

Centrally reflected in Chapter 2 "Normative References", the specific adjustments are as follows.

\* Replace IEC 61196-1 with GB/T 17737.1-2013 which is equivalent to adopting international standards;

\* Replacing IEC 61196-8 with GB/T 17737.8-2022, which adopts the international standard;

\* Replace IEC 62037-1 with GB/T 21021.1-2021 which is equivalent to adopting international standards;

\* Replace IEC 62037-4 with GB/T 21021.4-2021 which is equivalent to adopting international standards.

--- Deleted the frequency range 500MHz~18GHz in Chapter 1 to improve operability;

--- Change "NS (not specified)" to "A (when applicable)" to adapt to domestic customs and avoid ambiguity;

---According to GB/T 17737.8-2022, Chapter 4 was revised, and "inner conductor continuity", "phase consistency (when required)" and "resistance" were added.

Stress cracking (applicable to FEP sheathed cables)" "Temperature Shock", changed "Average Characteristic Impedance" to "Characteristic Impedance", revised "Conductor"

"Adhesion", "Bendability", "Repetitive Bending" and "Cable Tensile Resistance (Longitudinal Tensile)" requirements, delete "Impedance Consistency".

The following editorial changes have been made to this document.

--- In accordance with the requirements of GB/T 1.1-2020, the preparation of the "Scope" chapter is standardized.

Please note that some content of this document may be patented. The issuing agency of this document assumes no responsibility for identifying patents.

## Introduction

Coaxial cables are widely used in mobile communication systems and other communication

systems such as radar and satellite.

With the advantages of strong capability, compact size and wide temperature range, it plays an important role in the transmission of communication signals in the communication system. GB/T 17737 is

The coaxial communication cable series product standard and test method standard are intended to consist of the following 11 parts.

--- Part 1. General Specifications General Principles, Definitions and Requirements. The purpose is to establish the general principles and definitions of coaxial cable design and test methods

and requirements.

--- Part 3. Sub-specification of coaxial cables for local area networks. The purpose is to establish the characteristics and versatility of coaxial communication cables for local area networks

performance requirements, quality assessment procedures, test and test methods, and recommended ratings.

--- Part 4. Leaky cable sub-specification. The purpose is to establish the characteristics and general performance requirements, quality evaluation of leaky coaxial communication cables.

procedures, test and test methods, and recommended ratings.

--- Part 5. Sub-specification of trunk and distribution cables for CATV. The purpose is to establish for CATV trunk and CATV distribution

Characteristics and general performance requirements, quality assessment procedures, test and test methods, and recommended ratings for coaxial communication cables.

--- Part 6. CATV drop-in cable sub-specification. The purpose is to establish the characteristics and general use of CATV drop-in coaxial communication cables

Performance requirements, quality assessment procedures, test and test methods, and recommended ratings.

--- Part 7. Cable sub-specification for BCT. The purpose is to establish the characteristics and general performance requirements of coaxial communication cables for BCT,

Quality assessment procedures, test and test methods, and recommended ratings.

--- Part 8. Sub-specification for PTFE insulated semi-flexible cables. The purpose is to establish PTFE insulated semi-soft coaxial communication

Cable characteristics and general performance requirements, quality assessment procedures, test and test methods, and recommended ratings.