

ICS 29.060.20

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

**GB/T 21204.1-2007**

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**Multicore and symmetrical pair/quad cables for digital  
communications to be used in harsh environments -- Part 1:  
Generic specifications**

用于严酷环境的数字通信用对绞或星绞多芯对称电缆 第1部分:总规范

**(English Translation)**

**Issued on: December 3, 2007**

**Implemented on: May 1, 2008**

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**Issued by: Standardization Administration of China**

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### Foreword

This section GB/T 21204 "for the harsh environment of digital communications quad-core symmetric multi-cable" - Part 1.

This section identical with IEC 62012-1:2002 "Digital communication is used in harsh environments for quad-core symmetric multi-cable 1 . Generic specification "(in English).

For ease of use, this part of IEC 62012-1:2002 made the following editorial changes.

--- Remove IEC 62012-1:2002 Foreword;

--- According to Chinese customs for some formatting has been modified;

--- To IEC 62012-1. IEC standard publication 2002 cited references to the use of appropriate IEC standard publication of standard;

--- Some of the statements apply to international standards to apply to our standard formulation.

This part of the Appendix A and Appendix B are normative appendices, Appendices C and D are informative appendices.

This part is proposed by the China Electrical Equipment Industrial Association.

This part of the National Standardization Technical Committee of wire and cable.

This section is drafted. Shanghai Electric Cable Research Institute, Ningbo Dongfang Group Co., Ltd., Haihan Xin Wire and Cable Co., Ltd. Zhejiang Zhaolong Cable Co., Ltd., Jiangsu Hengtong Group Co., Ltd. in Anhui Xinke cable.

### Introduction

User building wiring or other IT wiring cables may have to work in harsh environments. It also may occur due to fire can be factory installed condition due. This section should be

used in conjunction with the 1.4 specification defined description of special functions. Detailed specification will be based on real International cable design specification with reference to one or several points.

GB/T 21204.1-2007/IEC 62012-1:2002 Digital communication is used in harsh environments on the quad-core symmetric multi-cable Part 1. Generic specification

## 1.1 Scope

This section GB/T 21204 specifies the definitions and test methods for the quad-core symmetric multi-cable when used in harsh environments, such a cable for digital communication systems, such as Integrated Services Digital Network (ISDN), local area network and data communication systems. This part of these cables the design and testing guidelines.

## 1.2 Normative references

The following documents contain provisions which, through reference GB/T 21204 in this section constitute provisions of this section. For dated reference documents Member, all subsequent amendments (not including errata content) or revisions do not apply to this section, however, encouraged to reach under this section Parties to research agreement to use the latest versions of these documents. For undated reference documents, the latest versions apply to this section.

GB/T 2423 (all parts), Environmental testing for electric and electronic products Part 2. Test methods [idt IEC 60068-2 (all section Minute)] GB/T 2951.1-1997 cable insulation and sheathing materials test methods - Part 1. General test method Section 1.

Measurement of thickness and overall dimensions --- mechanical tests (idt IEC 60811-1-1:1993) GB/T 2951.3-1997 cable insulation and sheathing materials test methods - Part 1. General test method Section 3.

Determination of density --- --- Water absorption tests - Shrinkage test (idt IEC 60811-1-3:1993) GB 6995.2 wire and cable identification Part II. standard color (GB 6995.2-1986, eqv IEC 60304. 1982) GB/T 11327.1-1999 PVC insulated low-frequency telecommunication cables and wires - Part 1. General test and Measurement Method (neq IEC 60189-1. 1986) GB/T 11313-1996 RF connectors - Part 1. Generic specification - General requirements and test methods (idt IEC 61169-1.

1992)

GB/T 14733.1 Telecom telecommunications terminology, channel and Network (GB/T 14733.1-1993, idt IEC 60050 (701)) GB/T 14733.8 term telecommunications telephone (GB/T 14733.8-1993, idt IEC 60050 (722)) GB/T 14733.11 term telecommunications transmission (GB/T 14733.11-1993, idt IEC 60050 (704)) Part 1 Test methods GB/T

17650.1 gases evolved during from cable combustion of materials. the total amount of halogen acid gas Determination (GB/T 17650.1-1998, idt IEC 60754-1:1994) Test Apparatus. Part 1 GB/T 17651.1 of cables burning under defined conditions the smoke density determination (GB/T 17651.1-1998, idt IEC 61034-1:1997) GB/T 17651.2 of cables burning under defined conditions Measurement of smoke density - Part 2. Test procedure and requirements (GB/T 17651.2-1998, idt IEC 61034-2:1997) GB/T 18015.1 digital communications quad Multicore and symmetrical cables Part 1. Generic specification (GB/T 18015.1-1999, idt IEC 61156-1:1994) GB/T 18380.1 cables under fire conditions test - Part 1. single insulated wire or cable vertical burning test Test method (GB/T 18380.1-2001, idt IEC 60332-1:1993) GB/T 18380.2 cables under fire conditions testing - Part 2. a single vertical insulated copper wire or cable GB/T 21204.1-2007/IEC 62012-1:2002