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

GB/T 18233.6-2022

**Information technology - Generic cabling for customer
premises - Part 6: Distributed building services**

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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 6 of GB/T 18233 "General Cabling for Information Technology User Buildings". GB/T 18233 has been released

The following parts.

- Part 1. General requirements;
- Part 2. Office premises;
- Part 3. Industrial buildings;
- Part 5. Data Centers;
- Part 6. Distributed building facilities.

This document is modified by ISO /IEC 11801-6.2017 "General Cabling for Information Technology User Buildings - Part 6. Distributed Buildings" Utilities".

Compared with ISO /IEC 11801-6.2017, this document has made the following structural adjustments.

- Set 3.2 in ISO /IEC 11801-6.2017 as Chapter 4, and the subsequent chapters will be extended in turn;
- Chapter 6 corresponds to Chapter 5 of ISO /IEC 11801-6.2017, and sets sub-clauses under 6.2.1 (see 6.2.1.1~6.2.1.3);
- Chapter 9 corresponds to Chapter 8 of ISO /IEC 11801-6.2017, and sets subclauses under 9.2.2.1 (see 9.2.2.1.1~

9.2.2.1.3); set sub-strips under 9.2.3.1 (see 9.2.3.1.1~9.2.3.1.4);

--- Set sub-sections in B.2.1 (see B.2.1.1~B.2.1.2).

The technical differences between this document and ISO /IEC 11801-6.2017 and their reasons are as follows.

--- Replaced ISO /IEC 14763-2 with the normative reference GB/T 34961.2 (see Chapter 3, Chapter 5, 6.4.4.1, 6.7.4 and

9.1);

--- Added a description of direct-connected cabling (see Chapter 5) to accommodate the possible use of direct-connected cabling;

--- Deleted the description in 5.7.6 of ISO /IEC 11801-6.2017 about telecommunications rooms and equipment rooms, due to the content of its normative references.

The content has been deleted and need not be specified in this document.

The following editorial changes have been made to this document.

--- Added acronyms and symbols BD, CD, C, EQP, FD, IT, TE and TO (see Chapter 4) to improve the ease of use of the document;

--- Delete the abbreviations MIMO and NFC of ISO /IEC 11801-6.2017, because they are not used many times in the text;

--- Deleted the explanatory text about the study to be studied (ffs);

--- Deleted the description of ISO and IEC standardized terminology;

--- Incorporated the amendments to ISO /IEC 11801-6.2017/Cor.1.2018, the outer margins of the clauses involved

marked with a vertical double line (||);

--- Correct the legend "15a)" "15b)" "15c)" "15d)" in Table 3 to "16a)" "16b)" "16c)" "16d)", due to ISO /

An editorial error in the reference to a figure in IEC 11801-6.2017;

--- Added informative references ISO /IEC TR11801-9907 (see Chapter 5).

--- Removed references to IEEE802.11 related standards in Informative Appendix A, because the typical radius of supported wireless application scenarios

Mainly related to frequency band and rate, no need to list corresponding standards;

--- Replace ISO /IEC 11801-2 with the informative reference GB/T 18233.2 (see Introduction, 6.2.2, B.2 and B.3.1);

--- Replaced ISO /IEC 11801-3 with GB/T 18233.3 cited for information (see Introduction,

B.2.1.1 and B.3.1);

--- Replaced ISO /IEC 11801-5 with an informative reference to GB/T 18233.5 (see Introduction, B.2 and B.3.1).

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

Introduction

GB/T 18233 "General Cabling for Information Technology User Buildings" is to guide the design of general cabling systems in specific types of buildings.

The compilation of GB/T 18233 is based on ISO /IEC 11801. According to ISO /IEC 11801, according to different building types and scenarios,

GB/T 18233 is intended to be composed of 6 parts.

--- Part 1. General requirements. The purpose is to provide the design basis for the general cabling system of the user's building complex, and to lay the cabling system for the specific place.

The design of the system provides a general reference.

--- Part 2. Office premises. The purpose is to provide a design basis for the general cabling system in the office.

--- Part 3. Industrial complexes. The purpose is to provide the design basis of general cabling system for industrial buildings.

--- Part 4. Residential. The purpose is to provide the design basis for the general cabling system of the residence.

--- Part 5. Data Centers. The purpose is to provide a design basis for the general cabling system of the data center.

--- Part 6. Distributed building facilities. The purpose is to provide a design basis for a general cabling system for distributed building facilities.

This document can be used alone or in conjunction with other parts of GB/T 18233 that specify specific locations.

The use of generic cabling to support non-user specific facilities and the sharing of information among these facilities is growing, many of which require the use of

Use a remote power supply device. The distributed realization of these facilities is either independent structure and configuration, or provided to GB/T 18233 in a superimposed form

Locations other than those specified in other sections.

Although some functional elements of distributed building facility cabling can be co-located with other common cabling infrastructure, they can.

- a) be designated, installed and operated by other entities than other cabling infrastructure installed on the premises;
- b) Specified and installed at other times than at the same time as other cabling infrastructure installed on the premises.

Figure 1 shows the overview and top-down of the information technology cabling-related standards formulated by ISO /IEC JTC1/SC25 and transformed in my country

Relations, including general cabling design standards, general cabling installation, operation and management standards and testing standards for installed general cabling.

Figure 1 The relationship between the general cabling documents formulated by ISO /IEC JTC1/SC25 and transformed in my country

The applications involved in this document include, but are not limited to, the applications in Appendix A of GB/T 18233.1-2022, as support for the following facilities.

- a) Telecom, such as WAP, DAS;
- b) Energy management, such as lighting, power distribution, household energy metering, etc.;
- c) environmental control, such as temperature, humidity;
- d) personnel management, such as access control, cameras, PIR detectors, time and attendance monitoring, electronic signs, audio and video projectors;
- e) personal information and alerts such as paging, patient monitoring, nurse calls, baby safety;
- f) Smart building system;
- g) Communication between devices (eg "Internet of Things").

This document.

--- Specifies a general cabling structure that supports a variety of applications, including but not limited to Appendix A of GB/T 18233.1-2022

Applications;

--- Adopt the E, EA, F and FA level balanced cabling and links specified in GB/T 18233.1-2022;

--- Adopt the optical fiber cable channel and link requirements specified in GB/T 18233.1-2022;