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

GB/T 18233.1-2022

Replacing GB/T 18233-2008

**Information technology - Generic cabling for customer
premises - Part 1: General requirements**

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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 for Standardization Documents" drafting.

This document is the first part of GB/T 18233 "General Cable Cabling for Information Technology User Buildings". GB/T 18233 has been issued

The following sections.

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

This document replaces GB/T 18233-2008 "General Cable Cabling for Information Technology User Buildings", and is consistent with GB/T 18233-2008

In addition to structural adjustments and editorial changes, the main technical changes are as follows.

--- Added "cable design document" (see 3.2), "test interface" (see 3.3), "socket" (see 3.6), "multi-unit cable" (see 3.9),

"Working temperature" (see 3.11), "functional performance" (see 3.12), "broadcasting and communication technology" (see 3.16), "convergence point jumper" (see

3.21), "active connector" (see 3.23), "cross-connect point" (see 3.26), "connector" (see 3.31), "connection cable" (see 3.33), "link" (see 3.34), "device interface" (see 3.44), "data center" (see 3.46), "attenuated near-end crosstalk ratio" (see 3.48), "attenuation near-end crosstalk power sum ratio" (see 3.49), "attenuation external far-end crosstalk ratio" (see 3.50), "attenuation external far-end Crosstalk power sum ratio" (see 3.51), "attenuation far-end crosstalk ratio" (see 3.52), "attenuation far-end crosstalk power sum ratio" (see 3.53), "Coaxial pair" (see 3.58), "alien crosstalk" (see 3.59), "average power sum of alien near-end crosstalk" (see 3.60), "external near-end Crosstalk loss" (see 3.61), "external near-end crosstalk loss power sum" (see 3.62), "external far-end crosstalk average power sum" (see 3.64), "Alien FEXT Loss" (see 3.65), "Alien FEXT Loss Power Sum" (see 3.66), "Cable Sharing" (see 3.71), "information and communication technology" (see 3.74), "information technology" (see 3.75), "terminal equipment" (see 3.83), "conversion equipment" (see 3.84) terms and definitions;

---Change "building distribution frame" to "building distribution area" (see 3.35, 3.1.6 of the.2008 edition), and "transition panel" to "distribution frame" (see 3.40, 3.1.51 of the.2008 edition), "distribution frame" is "wiring area" (see 3.41, 3.1.25 of the.2008 edition), "four-wire group" is "star Strand" (see 3.76, 3.1.53 of the.2008 edition), "Park distribution frame" is "Park wiring area" (see 3.81, 3.1.14 of the.2008 edition);

--- Deleted "CP cable" (see 3.1.22 of the.2008 edition), "CP link" (see 3.1.23 of the.2008 edition), "equipment room" (see 3.1.27 of the.2008 edition), "fixed horizontal cables" (see 3.1.29 of the.2008 edition), "floor distribution frame" (see 3.1.30), "horizontal cable" (see 3.1.32 of the.2008 edition), "multi-user telecommunications socket assembly" (see 3.1.44 of the.2008 edition), "Fiber optic duplex adapter" (see 3.1.46 of the.2008 edition), "fiber optic duplex connector" (see 3.1.47 of the.2008 edition), "full filling input" (see 3.1.48 of the.2008 edition), "small form factor connector" (see 3.1.56 of the.2008 edition), "telecommunication" (see.2008 edition)

3.1.58), "telecommunication room" (see 3.1.59 of the.2008 edition), work area (see 3.1.64 of the.2008 edition), "work area jumper"

(see 3.1.65 of the.2008 edition);

--- Added abbreviations AACR-F, ACR-F, ACR-N, AFEXT, ANEXT, C, DAB, DVB-C, DVB-S, DVB-

T, EI, PL, PSAACR-F, PSAACR-Favg, PSACR-F, PSACR-N, PSAFEXT, PSAFEXTnorm, PSANEXT, PSANEXTavg, PSFEXT, TI, TV (see 4.1);

--- Deleted the abbreviations ER, FDDI, HEM, MUTO, OFL, PSELFEXT, SC-D, SFF (see 3.2 of the.2008 edition);

--- Changed functional elements (see 6.1, 5.2 of the.2008 edition);

--- Changed the introduction of the cabling subsystem (see 6.3, 5.3 of the.2008 edition);

--- Deleted "subsystem interconnection" (see 5.4 of the.2008 edition);

--- Added an overview of "environmental performance" and environmental grades (see 7.2);

--- Increased the introduction of EA level, FA level, BCT-B level, I level and II level balanced cabling (see 7.3.1), and added the corresponding level

Channel performance requirements (see Chapter 7), link performance requirements (see Chapter 8);

--- Increased channel performance of coaxial cabling (see 7.4), link performance requirements (see 8.3);

--- Increased channel performance of optical fiber cabling (see 7.5), link performance requirements (see 8.4);

--- Deleted "shielding practice" (see Chapter 11 of the.2008 edition), "management" (see Chapter 12 of the.2008 edition);

--- Added coaxial jumper requirements (see 12.4), optical fiber jumper requirements (see 12.5);

--- Deleted the CP link performance requirements (see Appendix A of the.2008 edition);

--- Deleted the test procedures (see Appendix B of the.2008 edition).

This document is modified to adopt ISO /IEC 11801-1.2017 "General cabling of information technology user buildings - Part 1.General

Require".

Compared with ISO /IEC 11801-1.2017, this document has made the following structural adjustments.

--- Set 3.2 in ISO /IEC 11801-1.2017 as chapter 4, and the number of subsequent chapters will be extended;

---Appendix A, Appendix B, Appendix D, Appendix E, and Appendix F correspond to Appendix E, Appendix A, and Appendix B of ISO /IEC 11801-1.2017

Appendix C, Appendix D;

--- Added Appendix C;

--- Deleted Appendix F of ISO /IEC 11801-1.2017.

The technical differences between this document and ISO /IEC 11801-1.2017 and their reasons are as follows.

--- Deleted the term "requirements to be met by design" in ISO /IEC 11801-1.2017, because it is not cited in the text;

---Deleted the abbreviations AC, ATM, BEF, B-ISDN, BO, CATV, CD, CSMA/ of ISO /IEC 11801-1.2017

CD, DCE, DRL, DTE, EMC, EO, IC, ICT, IDC, ILD, IPC, IT, LAN, LCL, LCTL, LDP, PMD, PVC, SCP, SO, TO, TP-PMD are not cited in the text;

--- Increased the conformity description of general requirements for the whole life process of general cable cabling (see Chapter 5) to adapt to the standard situation and technical conditions of our country

technical conditions;

--- Added the corresponding content about the modular plug termination link (see 6.3.6 and Appendix C), because the modular plug termination link

increasingly frequent and widespread use;

--- Replaced IEC 61918 (see 7.2.2) with the normatively quoted GB/T 26336 to adapt to the technical conditions of our country;

--- Replaced ISO /IEC 14763-3 (see 7.5.2.1, 11.5.1 and Appendix B.2.3) with the normatively referenced GB/T 34961.3 to

Adapt to the technical conditions of our country;

--- Replaced IEC 60793-1-44 (see 10.5.2.3) with the normatively quoted GB/T 15972.44 to adapt to the technology of our country

condition;

--- Replaced ISO /IEC 14763-2 with the normative reference GB/T 34961.2 (see 11.1.3, 11.1.6, 11.2.1, 11.2.2,