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

GB/T 35136-2024

**General technical requirements for control equipment of smart
home**

智能家居自动控制设备通用技术要求

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Table of Contents

1 Scope ...	1
2 Normative references ...	1
3 Terms and Definitions ...	1
4 Abbreviations ...	2
5 Smart Home System ...	3
5.1 System Architecture ...	3
5.2 System Requirements ...	3
6 Equipment requirements ...	4
6.1 General requirements ...	4
6.2 Central Control Equipment ...	4
6.3 Access Device ...	4
6.4 Interactive Devices ...	5
6.5 Functional equipment ...	5
7 Intelligent Control ...	5
7.1 Control Mode ...	5
7.2 Control Input ...	6
7.3 Control Rules ...	6
7.4 Control Output ...	6
8 Data Integration ...	6
8.1 Controlling Data Flow ...	6
8.2 Data Unit ...	7
8.3 Data Synchronization ...	8
8.4 Authentication Code Generation ...	9
21 References ...	22

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 is required. This document replaces GB/T 35136-2017 "General technical requirements for smart home automatic control equipment". Compared with GB/T 35136-2017, In addition to structural

adjustments and editorial changes, the main technical changes are as follows: Added a chapter on "Smart Home Systems" and incorporated the revised content of "Network Topology" from the.2017 edition (see Chapter 5,

5.1 of the.2017 edition);

a) The communication protocol has been deleted (see

5.2 of the.2017 edition);

b) Changed the content related to "Equipment Requirements" (see Chapter 6, Chapter 6 of the.2017 edition);

c) Added a chapter on "Intelligent Control" (see Chapter 7);

d) Added a chapter on "Data Integration" and modified "Authentication Code Generation Mechanism" to include it (see Chapter 8,.2017 Edition). A.4);

e) Added examples of typical equipment requirements and incorporated the relevant contents of the.2017 edition after modification (see Appendix A, 6.3,.2017 edition 6.4, 6.5, 6.6, 6.7, 6.8, 6.9, 6.10, 6.11);

f) Added typical scenario control examples and incorporated the relevant contents of the.2017 edition after modification (see Appendix B,.2017 edition Chapter 7);

g) Added an example of device data element exchange (see Appendix C);

h) Added object dictionary example - air conditioning equipment (see Appendix D).

i) Please note that some of the contents of this document may involve patents. The issuing organization of this document does not assume the responsibility for identifying patents. This document was proposed by the Ministry of Housing and Urban-Rural Development of the People's Republic of China. This document is under the jurisdiction of the National Technical Committee for Digitalization of Intelligent Buildings and Residential Areas (SAC/TC 426). This document was drafted by: Zhongguancun Lejia Smart Residential Area Industry Technology Alliance, Shenzhen Lumi Lianchuang Technology Co., Ltd., Jiangsu Juxin Group Cheng Circuit Technology Co., Ltd., Shenzhen Orvibo Technology Co., Ltd., Kuaizhu Intelligent Technology (Suzhou) Co., Ltd., China Telecom Sub-engineering design institute Co., Ltd., Guangdong Ruikesi Intelligent Technology Co., Ltd., Foshan Yunmi Electric Technology Co., Ltd., Green building wisdom Technology (Beijing) Co., Ltd., Foshan Electrical Lighting Co., Ltd., Guangdong Dianpai Intelligent Technology Co., Ltd., Guangdong Fulinmen Shijia Intelligent Energy Home Furnishing Co., Ltd., China Power Investment Engineering Research, Testing and Assessment Center Co., Ltd., China Mobile (Hangzhou) Information Technology Co., Ltd., Qingdao Haier Technology Co., Ltd., Midea Group (Shanghai) Co., Ltd., Zhejiang Morgan Group Co., Ltd., Sino-Foreign Construction Information Co., Ltd., Shenzhen Shenzhen Yuefu Group Co., Ltd., Xiamen Dinaike Intelligent Technology Co., Ltd., Guangzhou Hedong Technology Co., Ltd., Shenzhen

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1 Scope

GB/T 35136-2024 is the Chinese general technical standard for smart home automatic control equipment, the gateways, hubs, panels and controllers that sit between the appliances and the user. It is the document that decides what a Chinese smart home controller has to do and has to survive. It sets the smart home system architecture and the system-level requirements first, so that a controller is specified in terms of the system it belongs to rather than in isolation, and then the equipment requirements: the general requirements, the central control equipment, the requirements on the interfaces and protocols by which the controller reaches the devices, on the local operation that must remain possible when the network or the cloud is unavailable, which is the single most consequential requirement in the document, on the security and the protection of user data, on the electrical safety and electromagnetic compatibility, on the environmental adaptability and reliability, and on the software update. It then gives the test methods, the inspection rules and the marking and packaging. It took effect on 23 August 2024.

This document specifies the smart home system, equipment requirements, intelligent control and data integration of smart home automatic control devices. This document applies to the research and development, manufacturing and application of smart home automatic control equipment.

2 Normative references

The contents of the following documents constitute the essential clauses of this document

through normative references in this document. For referenced documents without a date, only the version corresponding to that date applies to this document; for referenced documents without a date, the latest version (including all amendments) applies. in this document.

GB/T 35143-2017 Internet of Things Smart Home Data and Equipment Coding

3 Terms and definitions

The following terms and definitions apply to this document.

3.1 Smart home system Based on home automation technology, it uses artificial intelligence, integrated wiring, Internet of Things, security and other technologies to connect home life related devices. equipment integration, build a self-learning management system for residential facilities and family schedule affairs, and improve home safety, convenience, comfort, and health. Health and achieve an automatically adjusted living environment.

3.2 Smart home service cloud A cloud computing-based smart home service platform that provides user management, device management, object dictionary, user data storage analysis and automatic Control strategy generation and other services.

3.3 Central control device Equipped with artificial intelligence technology, it can interact with users in multiple ways such as voice, image, and text, and can respond to user needs and behavior habits. A home control hub device that is used to perform autonomous learning and decision optimization.

3.4 household data A collection of home life data.

Note. Including but not limited to user health data, home environment data, device status data, etc.

3.5 Access device A device that enables central control devices, interactive devices, functional devices, etc. to connect to the smart home system and exchange data.

Note. Including but not limited to home routers, bus gateways, narrowband wireless gateways and WLAN access points, etc.

3.6 interactive device A device in a smart home system that enables the system to communicate with users through vision, hearing, touch, etc.

Note. Including but not limited to smart speakers, touch screen control panels, mobile control devices, etc.