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

GB/T 42616-2023

**Internet of things for lifts, escalators and moving walks -
Technical specification of monitoring terminals**

电梯物联网 监测终端技术规范

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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: Please note that some contents of this document may refer to patents: The issuing agency of this document assumes no responsibility for identifying patents: This document is proposed and managed by the National Elevator Standardization Technical Committee (SAC/TC196): This document is drafted by: Schindler (China) Elevator Co., Ltd., Kone Elevator Co., Ltd., Shanghai New Star Electric Co., Ltd., Shanghai Special Equipment Supervision and Inspection Technology Research Institute, China Academy of Building Research Co., Ltd: Construction Mechanization Research Branch, Shanghai Mitsubishi Electric Elevator Co., Ltd., Otis Elevator (China) Investment Co., Ltd., Hitachi Elevator (China) Co., Ltd., Wuxi Chuanglian Technology Co., Ltd., Guangdong Provincial Special Equipment Testing Research Institute, Chongqing Special Equipment Testing Research Institute, Toshiba Elevator (China) Co., Ltd., Guangdong Tiyun Technology Co., Ltd: Division, Disheng Elevator (Shanghai) Co., Ltd., Otis Electromechanical Elevator Co., Ltd., Yongda Elevator Equipment (China) Co., Ltd., Hitachi Building Technologies (Guangzhou) Co., Ltd., Suzhou Inovance Technology Co., Ltd., Guangzhou Guangri Elevator Industry Co., Ltd., CANNY Elevator Co., Ltd., Lingwang Electric Elevator Co., Ltd., Xizi Elevator Technology Co., Ltd., Hangzhou Theo Elevator Co., Ltd., Suzhou Diao Elevator Co., Ltd., Xiji Schindler Elevator Co., Ltd: Co., Ltd., Suzhou Market Supervision and Management Information Center, Dongguan Testing Institute of Guangdong Special Equipment Testing Research Institute, Sunlong Elevator Co., Ltd: Company, Giant KONE Elevator Co., Ltd., Sicher Elevator Co., Ltd., Weber Elevator Co., Ltd., Hangzhou Youmai Technology Co., Ltd., Disheng Escalator Co., Ltd., Guangdong Huanyu Electronic Technology Co., Ltd., Xinti Zhonghe Technology Co., Ltd., Beijing Construction Mechanization Research Institute Co.,

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1 This document does not repeatedly include general technical specifications applicable to any electrical and mechanical: 0:1:

2 The monitoring terminal shall be installed and maintained by competent personnel or authorized personnel: 0:

2 Assumptions 0:2:

1 When formulating this document, the assumptions mentioned in 0:2:2~0:2:4 were made: 0:2:

2 This document does not consider that the monitoring terminal cannot work normally due to communication network infrastructure failures, upgrades, routine maintenance, etc: Case: 0:2:

3 The buyer and the supplier have negotiated and reached an agreement on the following contents:

a) the intended use of the monitoring terminal;

b) Environmental conditions, such as exposure to sunlight, wind, snow, corrosive air, explosive gas, combustible dust;

c) ventilation and cooling;

d) Other matters related to the installation site: 0:2:

4 The monitoring terminal is well maintained and in normal working condition: Elevator Internet of Things Monitoring Terminal Technical Specifications

1 Scope

GB/T 42616-2023 specifies the box that watches a lift. Remote monitoring of lifts, escalators and moving walks has moved from a premium service to something close to an expectation: it is how an entrapment is detected without waiting for someone to press an alarm, and how maintenance shifts from a fixed calendar to the condition of the machine. Everything downstream - the platform, the dispatcher, the maintenance record - depends

on a terminal that reports accurately and keeps reporting, which is why the terminal itself needs a specification rather than being left to each supplier. This document sets out the technical requirements for such monitoring terminals, the test methods for verifying them, the inspection rules, the markings, labels and accompanying documentation, and the requirements for packaging, transport and storage. It applies to monitoring terminals based on Internet of Things technology for lifts, escalators and moving walks. Filed under ICS 91.140.90 and CCS Q78, it is written for terminal manufacturers, lift makers and maintenance companies, and for the market regulators who increasingly rely on this data to supervise lift safety at scale.

This document specifies the technical requirements, test methods, inspection rules, and standards for monitoring terminals used in the Internet of Things for elevators, escalators and moving walks: logos, labels and accompanying documents, as well as packaging, transportation and storage: This document applies to monitoring terminals based on IoT technology for elevators, escalators and moving walks: This document does not apply to control the operation of elevators, escalators and moving walks through monitoring terminals:

2 Normative references

The contents of the following documents constitute the essential provisions of this document through normative references in the text: Among them, dated references For documents, only the version corresponding to the date is applicable to this document; for undated reference documents, the latest version (including all amendments) is applicable to this document:

GB/T 191 Packaging, storage and transportation icon marks

GB/T 4208-2017 Enclosure protection level (IP code)

GB 4706.1-2005 Safety of Household and Similar Electrical Appliances Part 1: General Requirements

GB/T 5169.16-2017 Fire Hazard Tests for Electrical and Electronic Products Part 16: Test Flame 50W Horizontal and Vertical Fire Flame test method

GB/T 5226.1-2019 Electrical Safety of Machinery and Electrical Equipment Part 1: General Specifications

GB/T 5465.2-2008 Graphical symbols for electrical equipment Part 2: Graphical symbols

GB/T 7024 Terminology for elevators, escalators and moving walks

GB/T 7588.1-2020 Safety Code for Manufacture and Installation of Elevators Part 1: Passenger Elevators and Freight Elevators

GB/T 9969 General Rules for Instructions for Use of Industrial Products

GB/T 10058-2009 Elevator Technical Conditions

GB/T 13384 General Technical Specifications for Packaging of Mechanical and Electrical Products

GB/T 15127-2008 Twisted pair multipoint interconnection for telecommunication and information exchange between information technology systems

GB/T 15211-2013 Environmental adaptability requirements and test methods for security alarm equipment GB/T 16895: