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

GB/T 31440-2025

Replacing GB/T 31440-2015

Card receiver and distributor for closed toll

封闭式收费用收发卡机

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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 replaces GB/T 31440-2015 "Closed-type contactless IC card transmitter and receiver for charging" and In addition to structural adjustments and editorial changes, the main technical changes are as follows.

- a) The terms and definitions of "contactless IC card," "card machine," "card holder," and "card delay rate" have been deleted (see 3.1, 3.4 to 3.6 of the 2015 edition);
- b) Added the terms and definitions of "vehicle pass card", "card slot", "read/write success rate" and "bad card" (see 3.1, 3.4 to 3.6);
- c) The requirements for composition, classification and model have been changed (see Chapter 4, Chapter 4 of the 2015 edition);
- d) The requirements for appearance quality, structure, and applicable conditions have been changed (see 5.1, 5.2, 5.1 and 5.2 of the 2015 edition);
- e) Deleted the functions and requirements of the kiosk card issuing machine, the functions and requirements of the kiosk card receiving machine, and the card holder function (see 5.3.1, 2015 version). 5.3.2 and 5.3.4);
- f) Changed the requirements for the card issuing machine function (see 5.3.1, 5.3.3 of the 2015 edition);
- g) Added requirements for card receiving machine functions (see 5.3.2);

- h) Modified the technical requirements for self-test function, alarm function and data communication interface function (see 5.3.3~5.3.5, 2015 edition) 5.3.5~5.3.7);
 - i) Deleted the technical requirements and test methods for clamp replacement or switching time, clamp margin, and jam rate (see 5.4.2, 2015 edition).
- 5.4.4, 5.4.5, 6.4.2, 6.4.4 and 6.4.5);
- j) Added technical requirements and test methods for the read and write success rate and structural stability of access cards (see 5.4.3, 5.8.7, 6.4.3 and 6.8.7).

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 is proposed and coordinated by the National Technical Committee for Standardization of Transportation Engineering Facilities (Highway) (SAC/TC223).

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This document was first published in 2015 and this is the first revision.

1 Scope

This document specifies the composition, classification and model, technical requirements, test methods, inspection rules and standards of closed-type card receiving and dispensing machines for payment.

Labeling, packaging, transportation and storage.

This document applies to the production and inspection of closed-type card receiving and dispensing machines for payment.

2 Normative references

GB/T 191

GB/T 2423.1

GB/T 2423.2

GB/T 2423.3

GB/T 2423.10

GB/T 2423.17

GB/T 3681.1

GB/T 4208-2017

GB/T 5080.7-1986

GB/T 17626.2

GB/T 17626.3

GB/T 17626.4

GB/T 18802.11

GB/T 22040

3 Terms and Definitions

The following terms and definitions apply to this document.

3.1 vehicle pass card vehiclepasscard

A medium used to record vehicle information and traffic information in highway network toll collection systems.

Note. Vehicle pass cards include composite pass cards (CPC for short) and ETC user cards.

3.2 card dispenser

A toll collection device located at the entrance lane of a toll station, which issues composite toll cards and monitors and manages the toll cards in the card machine.