

ICS 35.100.70

CCS L 79



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

GB/T 31455.7-2025

Replacing GB/T 31455.7-2015

**Intelligent system of bus rapid transit (BRT) - Part 7: Interface
specifications between public transport priority devices and
traffic signal controllers**

快速公交（BRT）智能系统 第7部分：公交优先设备与交通信号控制机通信数据
接口规范

Issued on: December 31, 2025

Implemented on: July 1, 2026

**Issued by: State Administration for Market Regulation;
Standardization Administration of the PRC**

Table of Contents

1.Scope	1
2 Normative References	1
3.Terms and Definitions	1
4.Abbreviations	1
5.General Requirements	2
6.Interface technical requirements	2
7.Test Methods	5
6 Appendix A (Normative) Information Format	7

Foreword

This document complies with the provisions of GB/T 1.1-2020 "Standardization Work Guidelines Part

1.Structure and Drafting Rules of Standardization Documents". Drafting. This document is Part 7 of GB/T 31455 "Intelligent Systems for Bus Rapid Transit (BRT)". GB/T 31455 has already published the following... part.

- 1.General Technical Requirements;
- 2.Technical Requirements for the Dispatch Center System;
- 3.Technical Requirements for Vehicle-Mounted Intelligent Terminals and Peripheral Equipment;
- 4.Technical Requirements for Station Platform Control Systems and Peripheral Equipment;
- 5.Communication Data Interface Specification between Dispatch Center and Vehicle-Mounted Intelligent Terminal;
- 6.Communication Data Interface Specification between Dispatch Center and Station Platform Control System;
- 7.Specification for Communication Data Interface between Bus Priority Equipment and Traffic Signal Controllers This document replaces GB/T 31455.7-2015 "Intelligent Systems for Bus Rapid Transit (BRT) - Part
- 7.Bus Priority Equipment and Traffic Communication". The "Specification for Communication Data Interface of No.
- 1 Controller" differs from GB/T 31455.7-2015 in that, apart from structural adjustments and

editorial changes, the main technical changes are as follows: The following is an explanation.

- a) The scope has been changed (see Chapter 1, Chapter 1 of the.2015 edition);
- b) Terms and definitions have been changed (see Chapter 3, Chapter 3 of the.2015 edition);
- c) Abbreviations have been changed (see Chapter 4, Chapter 4 in the.2015 edition);

1 Scope

GB/T 31455.7-2025 is the Chinese national standard covering how a bus asks a traffic light for green - the priority request and its parameters, the controller's response and the conditions under which it may refuse, which is what makes bus priority work without wrecking the rest of the junction. Part 7 of the series. It replaces GB/T 31455.7-2015. It was issued on 31 December 2025 and has been in force since 1 July 2026, replacing GB/T 31455.7-2015. The document is under the responsibility of the Standardization Administration of China. This page is published from the official record of the 2025 edition; the clause text of a standard this recent is not yet in circulation, and the figures, limits and tables it contains are those of the document itself, delivered in full with the English translation.

This document specifies the data communication procedures between bus priority devices and traffic signal controllers (hereinafter referred to as signal controllers) in a Bus Rapid Transit (BRT) intelligent system. The overall requirements for communication, interface technology requirements, testing methods, and verification rules. This document applies to the planning, design, construction, and communication data interface between bus priority equipment and signal controllers in a Bus Rapid Transit (BRT) intelligent system. Operations and maintenance.

2 Normative references

The contents of the following documents, through normative references within the text, constitute essential provisions of this document. Dated citations are not included. For references to documents, only the version corresponding to that date applies to this document; for undated references, the latest version (including all amendments) applies. This document.

GB/T 2260 Administrative Division Codes of the People's Republic of China

GB/T 31455.1 Intelligent Bus Rapid Transit (BRT) Systems - Part

3 Terms and Definitions

The terms and definitions defined in GB/T 31455.1 and GA/T 1743-2020 apply to this

document.

4. Abbreviations The following abbreviations apply to this document. BRT. Bus Rapid Transit
C-V2X. Cellular-Vehicle to X (Vehicle-to-X) wireless communication technology for vehicles.
IP. Internet Protocol

chinastandards.org - PREVIEW