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

GB/T 30290.4-2025

Replacing GB/T 30290.4-2013

**BeiDou satellite positioning vehicle information service system
(VISS) - Part 4: Performance requirements and test methods for
vehicle information terminal**

北斗卫星定位车辆信息服务系统 第4部分：车载信息终端性能要求及测试方法

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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 4 of GB/T 30290 "BeiDou Satellite Positioning Vehicle Information Service System". GB/T 30290 has been published. The following section.

- 1.Functional Description;
- 2.Information Exchange Protocol between Vehicle Terminal and Service Center;
- 3.Information Security Specifications;
- 4.Performance Requirements and Test Methods for Vehicle-Mounted Information Terminals;
- 5.Recorder Performance Requirements and Test Methods;
- 6.Performance requirements and test methods for emergency rescue terminals. This document partially replaces GB/T 30290.4-2013 "Satellite Positioning Vehicle Information Service System Part 4.General Specifications for Vehicle Terminals". Compared with GB/T 30290.4-2013, the main technical changes in the "Standard" are as follows, except for structural adjustments and editorial modifications.
 - a) The terms "vehicle tracking," "vehicle location," and "signal acquisition" and their definitions (see 3.1, 3.2, and 3.3 in the.2013 edition) have been removed, and the following have been added. The terms "Vehicle Information Service Center," "In-Vehicle Information Terminal," "User Application Service," "Initial Location Time," "Cold Start," and "Hot Start" have been added. "Startup", "Reacquisition Time", and "Positioning Accuracy" and their definitions (see 3.1, 3.2, 3.3, 3.4, 3.5, 3.6, 3.7, and 3.8);
 - b) The functional unit descriptions in "Composition" have been modified (see 5.1, 5.1.1 in the.2013 version), and a functional unit composition diagram for "Composition" has been added. (See Figure 1);
 - c) Removed "Configuration Parameter Modification" and "Location Information Report" from "Basic Functions" (see

1 Scope

GB/T 30290.4-2025 is the Chinese national standard covering the terminal itself - the positioning accuracy and reporting reliability in a moving vehicle, the storage when out of coverage, the power behaviour when the ignition is off, and the vibration, temperature and EMC of an automotive environment. Part 4 of the series. It replaces GB/T 30290.4-2013, in force from 1 February 2026. Issued on 5 October 2025, it has been in force since 1 February 2026, replacing GB/T 30290.4-2013.

This document specifies the functional and performance requirements of the vehicle-mounted information terminal in the BeiDou satellite positioning vehicle information service system, and describes the testing... method. This document applies to communication between vehicles and public or dedicated mobile communication networks

via BeiDou satellite positioning technology. The design, testing, and application of in-vehicle information terminals for information interaction with information service centers. This is achieved through other positioning technologies and communication networks. The design, testing, and application of in-vehicle information terminals that interact with vehicle information service centers should be referenced for this purpose.

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 4208 Degrees of protection provided by enclosures (IP code) GB/T 13306
Nameplates

GB/T 18655-2025 Radio interference characteristics of vehicles, ships and internal combustion engines - Limits and measurements for protecting onboard receivers method

GB/T 19951-2019 Test methods for the immunity of electrical/electronic components of road vehicles to electrostatic discharge

GB/T 21437.2-2021 Test methods for electrical/electronic interference caused by conduction and coupling in road vehicles - Part

3 Terms and Definitions

The terms and definitions defined in GB/T 30290.1, GB/T 30290.2-2025 and GB/T 30290.3-2025, as well as the following terms and definitions, apply.