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

GB/T 30290.5-2025

Replacing GB/T 30290.4-2013

**BeiDou satellite positioning vehicle information service system
(VISS) - Part 5: Performance requirements and test methods for
recorder**

北斗卫星定位车辆信息服务系统 第5部分：记录仪性能要求和测试方法

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Table of Contents

1	Scope
2	Normative references
3	Terms and Definitions
4	Part
5	Recorder Performance Requirements and Test Methods
5.1	Composition
5.2	Functional Requirements
5.3	Performance Requirements
5.4	Power Adaptability
5.5	Environmental adaptability
5.6	Electromagnetic Compatibility
5.7	Enclosure Protection
5.8	Nameplate
5.9	Appearance
6.1	Test Conditions
6.2	Composition
6.3	Function
6.4	Performance
6.5	Power adaptability
6.6	Environmental adaptability
6.7	Electromagnetic Compatibility
6.8	Enclosure protection
6.9	Nameplate
24	References

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 5 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," "data recorder," "acceleration," "lateral acceleration," "longitudinal acceleration," and "vertical acceleration" were added. "Irreversible restraint device", "first positioning time", "cold start", "warm start", "recapture time" and "positioning accuracy" and their definitions (See 3.1, 3.2, 3.3, 3.4, 3.5, 3.6, 3.7, 3.8, 3.9, 3.10, 3.11, 3.12, and 3.13);
 - 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 2);
 - c) Removed "Configuration Parameter Modification" and "Location Information Report" from "Basic Functions" (see

1 Scope

GB/T 30290.5-2025 is the Chinese national standard covering the recorder that keeps the evidence - the data retained and for how long, the tamper resistance and the integrity of the record, the survival of the memory through a crash or a fire, and the extraction of the data afterwards. Part 5 of the series, new in this revision, carved out of what was Part 4. 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 recorder in the BeiDou satellite positioning vehicle information service system and describes the test methods. 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 a recorder for information interaction with the information service center. This involves using other positioning technologies and communication networks to achieve communication with the vehicle. The design, testing, and application of the information interaction recorder in the information service center can be used as a reference.

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 Limits and measurements of radio interference characteristics of vehicles, ships and internal combustion engines for the protection of 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. This document.