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

GB/T 46370-2025

**Performance requirements and test methods for BeiDou
heading determination terminals**

北斗定向型接收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. Please note that

some content in this document may involve patents. The issuing organization of this document assumes no responsibility for identifying patents. This document was proposed and is under the jurisdiction of the Ministry of Industry and Information Technology of the People's Republic of China. This document was drafted by: Shandong Beidou Huachen Navigation Technology Co., Ltd., Taidou Microelectronics Technology Co., Ltd., and Beijing Huachen Wantai. Technology Co., Ltd., Tsinghua University, and Shanghai Sinan Satellite Navigation Technology Co., Ltd. The main drafters of this document are: Zeng Runguo, Yuan Rong, Jia Qinglu, Bai Zhengdong, Ding Zhigang, Wang Liduan, and Han Yulong. Performance Requirements and Test Methods for BeiDou Directional Receiver Terminals

1 Scope

GB/T 46370-2025 is the Chinese national standard covering the dual-antenna BeiDou receiver that gives heading as well as position - the angular accuracy against the baseline length, the time to fix and the reacquisition, the behaviour under multipath and vibration, and the tests that establish each. First edition, under the Ministry of Industry and Information Technology, in force from 1 February 2026. Issued on 31 October 2025, it has been in force since 1 February 2026.

This document specifies the performance requirements for BeiDou directional receiving terminals and describes the test methods. This document applies to the research, development, production, and testing of Beidou directional receiving terminals (hereinafter referred to as "directional terminals").

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 17626.3-2023 Electromagnetic compatibility testing and measurement techniques - Part

3.1 Terms and Definitions The terms and definitions defined in

GB/T 46368-2025, as well as the following terms and definitions, apply to this document.

3.1.1 Antenna phase center The center of curvature of the phase surface of the far-field radiation field of the antenna. [Source: GB/T 46368-2025, 3.1.17]

3.1.2 A module that has both positioning and orientation functions.

Note. This module requires two external navigation satellite signal receiving antennas to process the two navigation satellite signals and complete orientation through BeiDou differential positioning.

3.1.3 cold start sensitivity The minimum signal strength required for a directional terminal to capture navigation satellite signals and achieve normal positioning under cold start conditions.

3.1.4 Tracking sensitivity After achieving normal positioning, the directional terminal tracks navigation satellite signals and maintains the minimum signal strength required for normal positioning.

3.1.5 First fix time The time required for a directional terminal to start up and for the positioning result to meet the requirements.

Note. Startup conditions include cold start and warm start.