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

GB/T 46369-2025

**Performance requirements and test methods for BeiDou
navigation terminal**

北斗导航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: China Electronics Technology Standardization Institute, Chengdu Anzeyou Technology Co., Ltd., and Beijing Beidou Navigation Technology Co., Ltd. Joint-stock limited company. The main drafters of this document are. Chen Qian, Du Hui, Wang Yigang, Chen Liang, and Jia Bowen. Performance requirements of Beidou navigation receiver terminals and testing methods

1 Scope

GB/T 46369-2025 is the Chinese national standard covering the finished navigation receiver - the positioning and velocity accuracy, the reacquisition after a tunnel, the behaviour under multipath and interference, the environmental and EMC requirements, and the tests each is demonstrated by. First edition, with the heading receiver standard GB/T 46370-2025. In force from 1 February 2026. Issued on 5 October 2025, it has been in force since 1 February 2026.

This document specifies the classification and composition, functional requirements, and performance requirements of BeiDou navigation receiver terminals, and describes the testing methods. This document applies to the design, development, production, and testing of Beidou navigation receiver terminals (hereinafter referred to as "navigation 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 20512 GPS Receiver Navigation and Positioning Data Output Format

3 Terms and definitions, abbreviations

3.1 Terms and Definitions The following terms and definitions apply to this document.

3.1.1 First fix time (timetofirstfix) ;TTFF The time required for a navigation terminal to start up and obtain a positioning result that meets the requirements.

Note. Startup conditions include cold start and warm start. [Source:

GB/T 19391-2003, 4.4, with modifications]

3.1.2 cold start Navigation terminals start up when there is no valid satellite ephemeris, satellite almanac, approximate time, or approximate location. [Source:

GB/T 19391-2003, 2.72, with modifications]

3.1.3 hotstart The navigation terminal starts up when the satellite ephemeris, time, and approximate location are valid. [Source:

GB/T 19391-2003, 2.74, with modifications]

3.1.4 re-acquisition time After a brief loss of lock on the received satellite navigation signal, the navigation terminal needs to recover the positioning result to meet the requirements.

time.

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

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