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**Artificial intelligence - Computing center - Computing capacity
assessment**

人工智能 计算中心 计算能力评估

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Foreword

This document conforms to GB/T 1.1-2020 "Standardization Work Guidelines Part

1.Structure and Drafting Rules of Standardization Documents". Drafting is scheduled.

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Computing capacity assessment of artificial intelligence computing centers

1 Scope

GB/T 46346-2025 is the Chinese national standard covering measuring what an AI computing centre can actually do - the throughput on representative training and inference workloads rather than the peak FLOPS on the datasheet, the interconnect and storage that usually bind, the utilisation achieved, and the reporting. First edition, and it belongs with the intelligent computing terminology GB/T 46572-2025. Already in force. Issued on 5 October 2025, it has been in force since 5 October 2025.

This document specifies the evaluation indicators for the computing capabilities of artificial intelligence computing centers and describes the corresponding evaluation methods. This document applies to the assessment of the computing capabilities of artificial intelligence computing centers, and also serves as a guide for the planning, design, construction, and service of artificial intelligence computing centers. It provides a reference for operation 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 listed below. 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 41867-2022 Terminology for Information Technology and Artificial Intelligence

GB/T 42018-2022 Information Technology Artificial Intelligence Platform Computing Resource Specification

GB/T 45087-2024 Performance Testing Methods for Artificial Intelligence Server Systems

3 Terms and Definitions

The terms and definitions defined in GB/T 41867-2022 and GB/T 42018-2022, as well as the following terms and definitions, apply to this document.

3.1 Artificial intelligence computing center A structure or group of structures that can provide artificial intelligence computing services to multiple users. Note

1. Abbreviated as "Intelligent Computing Center," an intelligent computing center includes hardware devices with artificial intelligence computing characteristics, such as computing, storage, and networking equipment, as well as device drivers and computing... Accelerator libraries, management components, and other necessary software components that support artificial intelligence computing capabilities. Note

2. Intelligent computing centers generally provide services such as training calculations, inference calculations, model fine-tuning, and related data storage, processing, and transmission for artificial intelligence models.

3.2 Artificial intelligence computing capability The ability to perform artificial intelligence computing tasks or support intelligent applications.

3.3 performance Measurable characteristics when running computational tasks. Note

1. Performance includes qualitative and quantitative characteristics. Note

2. Performance is measured based on one or more parameters (such as runtime, energy consumption, throughput, actual throughput, floating-point operations per second, fault recovery time, etc.). Quantified or calculated to characterize the capability and efficiency of a technical process operating in a certain device (group).

3.4 computing node Devices or groups of devices that provide computing power.

Note. In intelligent computing centers, computing nodes typically include computing devices such as AI accelerator processors, AI accelerator cards, or AI servers, as well as... Any other storage and networking devices in the intelligent computing center used for processing computing tasks.