

ICS 35.020
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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 45629.1-2025

**Information technology - Data centre facilities and
infrastructures - Part 1: General concepts**

信息技术 数据中心设备和基础设施 第1部分：通用概念

(English Translation)

Issued on: April 25, 2025

Implemented on: November 1, 2025

**Issued by: State Administration for Market Regulation, China National
Standardization Administration**

Table of Contents

Preface
Introduction
1 Scope
2 Normative references
3 Terms and definitions, abbreviations
4 Compliance
5 Business Risk Analysis
6 Data Center Design Overview
7 Design classification of data center facilities and infrastructure
8 Design and implementation process
9 Design Principles
Appendix A (Informative) Availability and Reliability
Appendix B (Informative) Availability Notes
Reference

Foreword

This document is in accordance with the provisions of GB/T 1.1-2020 "Guidelines for standardization work Part 1: Structure and drafting rules for standardization documents" Drafting.

This document is part 1 of GB/T 45629 "Information Technology Data Center Equipment and Infrastructure". GB/T 45629 has been issued The following parts are published.

--- Part 1: General concepts.

This document is equivalent to ISO /IEC 22237-1:2021 "Information technology data center equipment and infrastructure Part 1: General concept".

Introduction

GB/T 45629 "Information Technology Data Center Equipment and Infrastructure" is planned to consist of 9 parts.

--- Part 1: General concepts. The purpose is to specify common terms, parameters and reference models for data center infrastructure.

--- Part 2: Building structure. The purpose is to specify the construction requirements of

data center infrastructure, etc.

--- Part 3: Power distribution. The purpose is to specify the power supply, distribution system, lightning protection, etc. of the data center.

--- Part 4: Environmental control. The purpose is to specify the temperature control, fluid control, vibration control, and particle control of the data center. System, etc.

--- Part 5: Communications Cabling Infrastructure. The purpose is to specify data center infrastructure network telecommunication cables, general information technology Wiring, building automation wiring, etc.

--- Part 6: Security system. The purpose is to specify the security and risk control of the data center.

--- Part 7: Management and operation information. The purpose is to specify the operation requirements and maintenance requirements of the data center.

--- Part 30: Earthquake risk and impact analysis. The purpose is to specify the requirements for data center seismic activity and seismic risk assessment types. Ask for and advice.

--- Part 31: Key performance indicators for disaster resilience. The purpose is to specify the key performance indicators for reliability, fault tolerance and availability of data centers. Key performance indicators.

1 Scope

This document defines the common aspects of data center equipment and infrastructure, including terminology, parameters and reference models (functional components and housing).

The data center infrastructure and equipment required to support the data center are generally described in the hierarchical system.

This document applies to the design, construction, renovation, and operation and maintenance of data center infrastructure.

2 Normative references

The contents of the following documents constitute essential clauses of this document through normative references in this document.

For referenced documents without a date, only the version corresponding to that date applies to this document; for referenced documents without a date, the latest version (including all amendments) applies to This document.

ISO /IEC 22237-6 Information technology Data center equipment and infrastructure Part 6: Security systems

3.1 Terms and Definitions

The following terms and definitions apply to this document.

3.1.1 Availability

Ability to operate as required.

[Source: GB/T 2900.99-2016, 192-01-23, Modification. Note 1 and Note 2 are deleted.]

3.1.2

Facilities that ensure access to a building for specific infrastructure or services in compliance with all relevant regulations.

3.1.3 Building security

Security facilities and systems installed at the entrance and inside the building containing the data center.

3.1.4 Co-hosting data centre

A data center that provides network access, servers, and storage devices to multiple users, where users run their own services in information technology equipment or application.

Note: The building's information technology equipment and supporting infrastructure are provided by the data center operator.

3.1.5 Co-location data centre

A data center where multiple customers can store their own network equipment, servers, and storage devices.