

ICS 35.110
CCS L 79



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

GB/T 16262.4-2025

Replacing GB/T 16262.4-2006

**Information technology - Abstract Syntax Notation One(ASN.1) -
Part 4: Parameterization of ASN.1 specifications**

信息技术 抽象语法记法一（ASN.1）第4部分：ASN.1规范的参数化
(English Translation)

Issued on: March 28, 2025

Implemented on: October 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	
3.1 Basic notation specification	
3.2 Information Object Specification	
3.3 Constraint Specification	
3.4 Additional Definitions	
4 Abbreviations	
5 Agreement	
6 Notation	
6.1 Assignment	
6.2 Parameterized Definition	
6.3 Symbol table	
7 ASN.1 terms	
8 Parameterized Assignment	
9 Reference parameterized definitions	
10 Abstract syntax parameters	
Appendix A (Informative) Example	
A.1 Example using parameterized type definitions	
A.2 Examples of using parameterized definitions and information object classes	
A.3 Examples of Limited Parameterized Type Definitions	
A.4 Example of parameterized value definition	
A.5 Example of parameterized value set definition	
A.6 Example of parameterized class definition	
A.7 Example of parameterized object set definition	
A.8 Example of parameterized object set definition	
Appendix B (Informative) Summary of Notation	

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 4 of GB/T 16262 "Abstract Syntax Notation for Information Technology One (ASN.1)". GB/T 16262 has been published The following parts.

- Part 1: Basic notation specification;
- Part 2: Information object specifications;
- Part 3: Constraint specifications;
- Part 4: Parameterization of the ASN.1 specification.

This document replaces GB/T 16262.4-2006 "Information Technology Abstract Syntax Notation One (ASN.1) Part 4: ASN.1 Specification"

Compared with GB/T 16262.4-2006, in addition to structural adjustments and editorial changes, the main technical changes are as follows.

- a) Changed the description of the range of "DummyReference" in "ParameterList" (see 8.4, 8.4 of the 2006 edition);
- b) The expressions of "parameterized assignment" and "parameterized reference" have been changed (see 8.7, 8.7 of the 2006 edition).

This document is equivalent to ISO /IEC 8824-4:2021 "Information technology Abstract Syntax Notation One (ASN.1) Part 4: ASN.1 Parameterization of specifications".

The following minimal editorial changes were made to this document.

- References to Appendix A and Appendix B are added to the text.

Introduction

GB/T 16262 "Abstract Syntax Notation for Information Technology One (ASN.1)" aims to standardize the abstract syntax notation.

Based on ISO /IEC 8824 (all parts), GB/T 16262 is intended to consist of four parts.

- Part 1: Basic notation specification. The purpose is to define data types, values and constraints on data types.
- Part 2: Information object specifications. The purpose is to provide information object categories, information objects and information object sets. Memorization method.
- Part 3: Constraint specification. The purpose is to provide a notation for specifying

user-defined constraints, table constraints and content constraints.

--- Part 4: Parameterization of ASN.1 specifications. The purpose is to define the parameterization notation of ASN.1 specifications.

1 Scope

This document defines the parameterized notation for the ASN.1 specification.

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.

GB/T 16262.1-2025 Information technology Abstract syntax notation 1 (ASN.1) Part 1: Basic notation specification (ISO /IEC 8824-1:2021, IDT)

GB/T 16262.2-2025 Information technology Abstract Syntax Notation 1 (ASN.1) Part 2: Information object specification (ISO /IEC 8824-2:2021, IDT)

GB/T 16262.3-2025 Information technology Abstract syntax notation 1 (ASN.1) Part 3: Constraint specification (ISO /IEC 8824-3:2021, IDT)

3 Terms and definitions

The following terms and definitions apply to this document.

3.1 Basic Notation Standards

This document uses the terms defined in GB/T 16262.1-2025.

3.2 Information Object Specification

This document uses the terms defined in GB/T 16262.2-2025.

3.3 Constraint Specification

This document uses the terms defined in GB/T 16262.3-2025.

3.4.1 Normalreferencename

A complete definition is provided and no actual parameters are required when using it.

3.4.2

A reference name defined using parameterized assignments refers to an incomplete definition and actual parameters must be provided when used.