

ICS 25.040
CCS N 10



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

GB/T 29618.3032-2026

**Field device tool (FDT) interface specification - Part 3032:
Communication profile integration - IEC 61784 CP 3/4, CP 3/5
and CP 3/6**

现场设备工具（FDT）接口规范 第3032部分：通信行规集成 IEC 61784 CP 3/4、
CP 3/5 和 CP 3/6

(English Translation)

Issued on: April 30, 2026

Implemented on: November 1, 2026

Issued by: State Administration for Market Regulation

Table of Contents

Preface	
Introduction	
1 Scope	
2 Normative References	
3 Terms, Definitions, Abbreviations, and Conventions	
3.1 Terms and Definitions	
3.2 Abbreviations	
3.3 Agreement	
4 Bus Category	
5 Accessing instance and device data	
5.1 Processing Channel Objects Provided by DTM	
5.2 DTM Service for Accessing Instance and Device Data	
6 Agreement-Specific Behaviors	
7 Protocol-Specific Uses of General Data Types	
8 Protocol-Specific General Data Types	
9 Network Management Data Types	
9.1 Overview	
9.2 Parameter Access Data Types	
10 Communication Data Types	
11 Channel Parameter Data Types	
12 Equipment Identification	
12.1 Protocol-Specific Handling of the STRING Data Type	
12.2 Equipment Type Identifier Data Type	
12.3 Topology Scan Data Type	
12.4 Scanning Identifier Data Type	
12.5 Equipment Type Identifier Data Type	
References	

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.

This document is Part 3032 of GB/T 29618, "Field Device Tool (FDT) Interface Specification". GB/T 29618 has been published.

The following section.

- Part 1: Overview and Guidelines;
- Part 2: Concepts and Detailed Description;
- Part 301: Communication Standards Integration with FF Fieldbus Specification;
- Part 302: Communication Industry Standards Integration of Common Industrial Protocols;
- Part 3031: Communication Industry Standard Integration IEC 61784 CP3/1 and CP3/2;
- Part 3032: Communication Industry Standard Integration IEC 61784 CP3/4, CP3/5 and CP3/6;
- Part 306: Communication Standards Integration with INTERBUS Fieldbus Specification;
- Part 309: Communication Industry Standard Integration IEC 61784CPF9;
- Part 315: Communication Standards Integration with MODBUS Fieldbus Specification;
- Part 41: Object Model Rules for Integrating a Common Object Model;
- Part 42: Object Model Rules Integration Common Language Infrastructure;
- Part 515: Communication Implementation of the Common Object Model in the MODBUS Fieldbus Specification;
- Part 5110: Communication implementation of the generic object model IEC 61784CPF1;
- Part 5120: Communication implementation of the generic object model IEC 61784CPF2;
- Part 5215: Communication implementation of the universal language infrastructure IEC 61784CPF15;
- Part 5231: Communication implementation of the universal language infrastructure IEC 61784 CP3/1 and CP3/2;
- Part 5232: Communication implementation of the universal language infrastructure IEC 61784 CP3/4, CP3/5 and CP3/6;
- Part 529: Communication implementation of the universal language infrastructure IEC 61784CPF9;
- Part 61: Style Guide for Device Type Manager in the Common Object Model;
- Part 62: Field Equipment and Tooling (FDT) Style Guide.

This document is equivalent to IEC 62453-303-2:2016 "Field Device Tool (FDT) Interface

Specification Part 303-2.Communication Standards".

Integrates IEC 61784 CP3/4, CP3/5 and CP3/6.

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 by the China Machinery Industry Federation.

This document is under the jurisdiction of the National Technical Committee on Standardization of Industrial Process Measurement, Control and Automation (SAC/TC124).

Introduction

This document is an interface specification for field devices that perform function control and data access in a client/server architecture.

For developers of the toolkit (FDT) components. This document presents the analysis results and design process for standard interface development, aiming to facilitate development by different manufacturers.

Seamless interoperability between the server and the client.

Integrating fieldbus into a control system requires several additional tasks. Besides fieldbus and device-specific tools...

In addition, it is necessary to integrate other tools into higher-level, system-wide planning or engineering tools. This is especially important for tools used in expansion and...

The use of heterogeneous control systems, especially in the process industry, is facilitated by clearly defined engineering interfaces, making them easy for all stakeholders to use.

It is very important.

The Device Type Manager (DTM) is a device-specific software component. The DTM software is provided by the device manufacturer along with the device.

Users integrate DTM into engineering tools through the FDT interface defined in this document. Typically, this integration method is applicable to all field operations.

The line is open, thus meeting the requirements for integrating different types of devices in heterogeneous control systems.

Figure 1 shows the location of this document in GB/T 29618 (all parts).

Figure 1. Structure diagram of this document

GB/T 29618 aims to provide an interface specification for FDT and is proposed to consist of the following parts.

---Part 1: Overview and Guidelines. The purpose is to provide an overview and guidelines

for the GB/T 29618 series, including.

- Explain the structure and content of the GB/T 29618 series;
- Provides some instructions that are applicable to other parts of the GB/T 29618 series;
- Describe its relationship with the other parts of GB/T 29618.

---Part 2: Concepts and Detailed Description. The purpose is to explain the general principles of field equipment and tool concepts, and to specify general definitions.

Images, generic object behaviors, and interactions between generic objects.

---Part 301: Communication Standards Integration with Foundation Fieldbus (FF) Specification. The purpose is to provide a specification for integrating Foundation Fieldbus (FF) technology.

Information integrated into the FDT interface specification (GB/T 29618.2) and specifies communication and other services.

---Part 302: Communication Industry Standards Integration General Industrial Protocols. The purpose is to provide specifications for integrating CIP technology into the FDT interface.

(GB/T 29618.2) information, and specifies communication and other services.

---Part 3031: Communication Standards Integration IEC 61784 CP3/1 and CP3/2. The purpose is to provide a means to integrate fieldbus technology.

Information integrated into the FDT interface specification (GB/T 29618.2) and specifies communication and other services.

---Part 3032: Communication Industry Standard Integration IEC 61784 CP3/4, CP3/5 and CP3/6. The purpose is to provide...

PROFINET technology is integrated into the FDT interface specification (GB/T 29618.2) and specifies communication and other services.

---Part 306: Communication Standards Integration with INTERBUS Fieldbus Specification. The purpose is to provide a framework for integrating INTERBUS technology...

Information integrated into the FDT interface specification (GB/T 29618.2) and specifies communication and other services.

---Part 309: Communication Standard Integration IEC 61784 CPF9. The purpose is to provide a method for integrating HART technology into FDT interfaces.

Information in the specification (GB/T 29618.2) and provisions for communication and other services.

---Part 315: Communication Standards Integration with MODBUS Fieldbus Specification.