

ICS 25.040
CCS N 10



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

GB/T 29618.3031-2026

**Field device tool (FDT) interface specification - Part 3031:
Communication profile integration - IEC 61784 CP 3/1 and CP
3/2**

现场设备工具（FDT）接口规范 第3031部分：通信行规集成 IEC 61784 CP 3/1
和 CP 3/2

(English Translation)

Issued on: May 25, 2026

Implemented on: December 1, 2026

Issued by: State Administration for Market Regulation

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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.

This document is Part 3031 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 modified to adopt IEC 62453-303-1:2016 "Field Device Tool (FDT) Interface Specification Part 303-1.Communication Standards".

Integrates IEC 61784 CP3/1 and CP3/2.

Compared with IEC 62453-303-1:2016, this document has undergone the following structural adjustments.

---Chapter 4 corresponds to 3.3 of IEC 62453-303-1:2016, and subsequent chapters and clauses have been updated in order;

---A new heading 9.2 requirement has been added following the overview in IEC 62453-303-1:2016, and subsequent chapter and clause numbers have been updated.

The technical differences between this document and IEC 62453-303-1:2016, and the reasons therefor, are as follows.

---IEC 61158-2:2014 has been replaced with normatively referenced IEC 61158-2:2023 (see Table 2), using normatively referenced...

IEC 62453-2:2022 replaces IEC 62453-2:2009 (see 4.1, 4.3, 6.2).

The following editorial changes have been made to this document.

---The standard name has been changed to "Field Device Tool (FDT) Interface Specification Part 3031: Communication Standard Integration IEC 61784".

CP3/1 and CP3/2;

---The footnote about PROFIBUS in Chapter 1 has been removed;

---The suspended section content in 7.5.2.2 has been deleted;

---The "Source" column in Tables 3 through 7 has been deleted;

---In Table 14, IEC 61158-5, 8.2.3.3.2, are replaced with the informative reference IEC 61158-5 (all parts).

Contents of IEC 61158-5, 8.2.3.3.3, etc.

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 developers of Field Device Tool (FDT) components, used for functional control in a client/server architecture.

Control and data access. This specification develops standard interfaces through analysis and design so that multiple vendors can operate seamlessly.

With the integration of fieldbus into the control system, some other work needs to be done. Besides fieldbus and device-specific functionalities...

Beyond these tools, they also need to be integrated into higher-level system planning and engineering tools. This is especially important in the context of broad and heterogeneous control systems.

In systems, especially in the process industry, it is crucial to define engineering interfaces that are easy for all stakeholders to use.

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

This document defines the FDT interface for integration into engineering tools. This integration method is typically open to all types of fieldbuses, thus satisfying...