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

GB/T 29618.1-2017

Replacing GB/T 29618.1-2013

**Field device tool (FDT) interface specification -- Part 1:
Overview and guidance**

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Administration of the People's Republic of China**

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3.1 Terms and definitions

Foreword

GB/T 29618 "Field Device Tool (FDT) Interface Specification" is divided into the following sections.

--- Part 1. Overview and guidelines;

--- Part 2. Concept and detailed description;

--- Part 301. Communication profile integrated FF field bus specification;

--- Part 302. Communication rules integrated universal industrial agreement;

--- Part 306. Communication rules integrated INTERBUS fieldbus specification;

--- Part 309. Communication profile integrated addressable remote sensor high-speed channel;

--- Part 315. Communication line regulation integrated MODBUS field bus specification;

--- Part 41. Object model lineage integration common object model;

--- Part 42. Object model rules integrated common language infrastructure;

--- Part 515. Common object model communication to achieve MODBUS field bus specification;

--- Part 51-10. Common Object Model Communication to achieve FF Fieldbus Specification;

--- Part 51-20. Common object model of communication to achieve universal industrial agreement;

Part 51-60. General object model communication to achieve INTERBUS fieldbus specification;

--- Part 51-90. Common object model of communication to achieve IEC 61784CPF9;

- Part 51-150. Common object model of communication to achieve IEC 61784CPF15;
- Part 52-10. General language infrastructure to achieve communication FF fieldbus specification;
- Part 52-20. Common language infrastructure to achieve universal industrial communication protocol;
- Part 52-31. Communication of the common language infrastructure IEC 61784CP3/1 and CP3/2;
- Part 52-32. Communication of common language infrastructure IEC 61784CP3/4, CP3/5 and CP3/6;
- Part 52-90. Communication of common language infrastructure IEC 61784CPF9;
- Part 52-150 of the General Language Infrastructure Communication IEC 61784CPF15;
- Part 61. Generic object model device type manager style guide;
- Part 62. Field Device Tool (FDT) common language infrastructure style guide.

This section GB/T 29618 Part 1.

This section drafted in accordance with GB/T 1.1-2009 given rules.

This Part replaces GB/T 29618.1-2013 "Field Device Tool (FDT) Interface Specification Part 1. Overview and Guidelines", the Department

Points and GB/T 29618.1-2013 compared to editorial changes in addition to the main technical changes are as follows.

- Added the terms "generic DTM" (see 3.1.26), "Interpretation DTM" (see 3.1.31);
- Added "DTM can be used as a specific DTM or generic DTM. A specific DTM is for a specific device or a series

developing. Universal DTMs support a device profile or device that integrates device descriptions (such as DD or FDI device packages)

Prepare "(see 4.3.3, 2013 version 4.3.3);

- Added "Part 42. Object Model Rules Integrate Common Language Infrastructure;" "Part 62. Field Device Tools

(FDT) Generic Language Infrastructure Style Guide "(see 5.1);

- Change the representation (see 5.1, 2013 version 5.1);
- Added "Object Model Integration Profile --- Common Language Infrastructure (CLI)" (see 5.4.3);
- Added IEC 62769 Field Device Integration (FDI) concepts and reviews. Field device

description based on EDDL device package

(IEC 61804-4 and 61804-4) and optional programmable graphical user interface (compatible with IEC 62453-42). Device package

In a integrated client-server architecture. An optional, OPCUA (IEC 62541) service is available

The information model of the interface of the device (see Table 1, Table 1 of the.2013 edition).

This section uses the translation method identical with IEC 62453-1.2016 "Field Device Tool (FDT) Interface Specification Part 1. Overview and Guidelines".

The documents of our country that are consistent with the corresponding international documents that are normative references in this section are as follows.

--- GB/T 16657.2-2008 Industrial Communication Network Fieldbus Specification Part 2. Physical layer specification and service definition

(IEC 61158-2.2007, IDT);

--- GB/T 20540.1-2006 measurement and control of digital data communications industrial control system with fieldbus type 3.PRO-

FIBUS Specifications Part 1. Overview and Guidance (IEC 61158-1 Type 3..2003, MOD);

--- GB/T 20540.2-2006 Measurement and control of digital data communications fieldbus type for industrial control systems 3.PRO-

FIBUS Specifications Part 2 Physical Layer Specifications and Service Definition (IEC 61158-2Type3.2003, MOD);

--- GB/T 20540.3-2006 Measurement and control of digital data communications fieldbus type for industrial control systems 3.PRO-

FIBUS Specifications Part 3. Data Link Layer Service Definition (IEC 61158-3 Type 3..2003, MOD);

--- GB/T 20540.4-2006 Measurement and control of digital data communications fieldbus type for industrial control systems 3.PRO-

FIBUS Specifications Part 4. Data Link Layer Protocol Specifications (IEC 61158-4 Type 3..2003, MOD);

--- GB/T 20540.5-2006 Measurement and control of digital data communications Industrial control systems with field bus type 3.PRO-

FIBUS Specifications Part 5. Application Layer Service Definition (IEC 61158-5 Type

3..2003, MOD);

--- GB/T 20540.6-2006 Measurement and control of digital data communications fieldbus type for industrial control systems 3.PRO-

FIBUS Specifications Part 6. Application Layer Protocol Specifications (IEC 61158-6 Type 3..2003, MOD);

Measurement and control of digital data communications - Fieldbus type 10 for industrial control systems.

PROFINET Specification Part 1. Application Layer Service Definition (IEC 61158-5 TYPE 10.2003, MOD);

Measurement and control of digital data communications - Fieldbus type 10 for industrial control systems.

PROFINET Specification Part 2. Application Layer Protocol Specifications (IEC 61158-6 TYPE 10.2003, MOD);

--- GB/T 20830-2015 Functional safety based on PROFIBUSDP and PROFINETIO Communication rules ---

PROFIsafe (IEC 61784-3-3.2010, IDT);

--- GB/T 25105.1-2014 Industrial Communication Network Fieldbus Specification Type 10.PROFINETIO Specification No. 1

Part. Application layer service definition (IEC 61158-5-10.2010, MOD);

--- GB/T 25105.2-2014 Industrial Communication Network Fieldbus specification type 10.PROFINETIO norms 2

Part. Application layer protocol specification (IEC 61158-6-10.2010, MOD);

--- GB/T 25105.3-2014 Industrial Communication Network Fieldbus specification type 10.PROFINETIO norms 3

Part. PROFINETIO Communication Profile (IEC 61784-2.2010, MOD);

--- GB /Z 26157.1-2010 Measurement and Control Digital Data Communication Fieldbus Type for Industrial Control Systems 2.Con-

trolNet and EtherNet/IP Specification Part 1 General Description (IEC 61158.2003 TYPE2, MOD);

--- GB /Z 26157.2-2010 Measurement and Control Digital Data Communication Fieldbus Type for Industrial Control Systems 2.Con-

trolNet and EtherNet/IP Specifications Part 2. Physical Layers and Media (IEC 61158-2.2003 TYPE2, MOD);