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

GB/T 29618.2-2017

Replacing GB/T 29618.2-2013

**Field device tool (FDT) interface specification -- Part 2:
Concepts and detailed description**

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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 of 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. Common language infrastructure to achieve communication EC61784CPF9;
- 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 2.

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

This Part replaces GB/T 29618.2-2013 "Field Device Tool (FDT) Interface Specification Part 2. Concept and detailed description",

This section compared with GB/T 29618.2-2013 In addition to editorial changes, the main technical changes are as follows.

- The range has been adjusted accordingly (see Chapter 1,.2013 Chapter 1);
- Normative references have been adjusted accordingly (see Chapter 2,.2013 Chapter 2);
- Added the term "sub DTM" (see 3.1.1);
- Added the term "parent DTM" (see 3.1.4);
- Increased agreement "UML use" (see 3.3.1);
- Removed the BTM item in Table 1, which indicated that the channel item was adjusted accordingly (see Table 1 in Table 1,.2013).
- Added an overview of the beginning of the framework application (see 4.2.2.1);
- Increased system communication (see 4.2.2.2);
- Added DTM Business Logic Overview (see 4.2.3.1);
- Added DTM category and the beginning of the overview, communication DTM (COMM-DTM), DTM equipment, gateway DTM, composite set

DTM, Module DTM, Block Type Manager (BTM);

--- Added DTM functions, command functions and static functions (see 4.2.3.3);

--- Increased identification and specific content (see 4.5);

--- Increased system and FDT topology (see 4.6);

--- Increased FDT communication (see 4.7);

--- Added Figures 7, 8, 9, 10 (see 4.2.3.2), Figure 12, Figure 13, Figure 14 (see 4.2.4), Figure 20, Figure 21

Figure 22 (see 4.9), Figure 23, Figure 24 (see 4.11), Figure 26, Figure 27, Figure 28, Figure 29, Figure 30 and Figure 31

--- Removed the PLC overview of the beginning of the PLC tool support document chapter, PLC process image changes (see.2013 version

6.4);

--- Removed part of ReadDataFromDevice service (see.2013 version 7.2.12.4);

--- Deleted the process of image authentication related FA services (see.2013 version 7.7.7).

This section uses the translation method identical with IEC 62453-2.2016 "Field Device Tool (FDT) Interface Specification Part 2. Concepts and

Detailed description "(in English).

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

--- Part 1 GB/T 15969.1-2007 programmable logic controller General Information (IEC 61131-1.2003, IDT);

--- Part 2. Equipment requirements and testing (IEC 61131-2.2007, IDT); --- GB/T 15969.2-2008;

Programmable logic controller - Part 3. Programming language (IEC 61131-3.2002, IDT);

GB/T 15969.4-2007 Programmable controller Part 4. User guide (IEC 61131-4.2004, IDT);

--- GB/T 15969.5-2002 programmable logic controller Part 5. Communication (idtIEC 61131-5.2000);

--- Part 6. Functional safety (IEC 61131-6.2012, IDT) --- GB/T 15969.6-2015;

--- GB/T 15969.7-2008 Programmable controller Part 7. Fuzzy control programming (IEC 61131-7.2000,

IDT);

--- GB/T 15969.8-2007 Programmable controller Part 8 - Programming language application and implementation guidelines (IEC /TR

61131-8.2003, IDT);

--- GB/T 29618.301-2015 Field Device Tool (FDT) Interface Specification Part 301. Communication Profile Integration FF

Fieldbus specification (IEC 62453-301.2009, IDT);

--- GB/T 29618.302-2013 Field Device Tool (FDT) Interface Specification Part 302. Communication Profile Integration General

Industrial Agreement (IEC 62453-302.2009, IDT);

--- GB/T 29618.306-2017 Field Device Tool (FDT) Interface Specification Part 306. Communication Profile Integration

INTERBUS Fieldbus Specification (IEC 62453-306 Ed. 1.0.2009, IDT);

--- GB/T 29618.309-2013 Field Device Tool (FDT) Interface Specification Part 309.

Remote Sensor High Speed Channel (IEC 62453-309.2009, IDT);

--- GB/T 29618.315-2013 Field Device Tool (FDT) Interface Specification Part 315. Communication Profile Integration

MODBUS Fieldbus Specification (IEC 62453-315.2009, IDT).

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Introduction

This section provides interface specifications for developers of FDT (Field Device Tool) components, FDT components for client/server architecture

Functional control and data access. This section is the result of analysis and design in the development of standard interfaces. These standard interfaces are easy to multiple