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

GB/T 29618.515-2017

**Field device tool (FDT) interface specification -- Part 515:
Communication implementation for common object model --
MODBUS fieldbus specification**

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Quarantine of the People's Republic of China, Standardization
Administration of the People's Republic of China**

Table of Contents

Foreword

1 Scope

2 Normative references

3 Terms, definitions, symbols, abbreviations and conventions

3.1 Terms and definitions

3.2 Symbols and abbreviations

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. CGE;
- Part 303-1. Communication profile integrated PROFIBUS field bus specification;
- Part 303-2. Communication profile integrated PROFINET input and output interface specification;
- Part 306. Communication rules integrated INTERBUS fieldbus specification;
- Part 309. Communication profile integrated HART fieldbus specification;
- Part 315. Communication line regulation integrated MODBUS field bus specification;
- Part 41. Object model lineage integration common object model;
- Part 501. Common Object Model of communication to achieve FF field bus specification;
- Part 502. Common object model of communication implementation CIP;
- Part 503-1. Common object model of communication to achieve PROFIBUS field bus specification;
- Part 503-2. Common object model of communication to achieve PROFINET input and output interface specification;
- Part 506. Common object model of communication to achieve INTERBUS fieldbus

specification;

--- Part 509. Common object model of communication to achieve HART fieldbus specification;

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

--- Part 61. Device type manager style guide for common object models.

This section GB/T 29618 of Part 515.

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

This section uses the translation method identical with IEC /T R62453-515.2009 Field Device Tool (FDT) Interface Specification Section 515

Minute. Common object model communication to achieve MODBUS fieldbus specification. "

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

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

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

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

This section made the following editorial changes.

--- To be consistent with existing standard series, the standard name is changed to "Field Device Tool (FDT) Interface Specification Part 515.

Communication with the object model to achieve MODBUS fieldbus specification. "

This part is proposed by China Machinery Industry Federation.

This part of the National Industrial Process Measurement Control and Automation Standardization Technical Committee (SAC/TC124) centralized.

This part of the drafting unit. Fujian Shunchang Hongrun Precision Instrument Co., Ltd., Southwest University, Machinery Industry Instrumentation Comprehensive Technology Economic Research

Institute, Rockwell Automation (China) Co., Ltd., Schneider Electric (China) Company, Suzhou Meiming Software Co., Ltd., Shanghai Automation Instrumentation

Table Co., Ltd., Chongqing Chuan Yi Automation Instrumentation Co., Ltd., Zhejiang University Institute of Intelligent Systems and Control, He You News (Shanghai)

Automation System Trading Co., Ltd.

1 Scope

This part of GB/T 29618 provides COM-based implementation, IEC 61784-2CPF15 (ModbusTCP) standard and

Modbus serial link integrated into FDT system information. This section GB/T 29618.41 used together.

Note. This section only specifies the mapping of Modbus parameters to FDT data types. In the FDT data type definition, the protocol specifies the permissible values associated with the parameters

Restrictions such as array restrictions, see IEC 61158-5-15 and GB/T MODBUSApplicationProtocolSpecification.

This section provides communication and other services.

This section does not contain FDT norms, nor is it an amendment to the FDT specification.

2 Normative references

The following documents for the application of this document is essential. For dated references, only the dated version applies to this article

Pieces. For undated references, the latest edition (including all amendments) applies to this document.

Specification for field device tool (FDT) interface - Part 1. Overview and guidance (IEC 62453-1).

2009, IDT)

Field device tool (FDT) interface specification Part 2. Concept and detailed description (IEC 62453-2).

2009, IDT)

GB/T 29618.41-2013 Field Device Tool (FDT) Interface Specification Part 41. Object Model Profile Integration - Common Object

Model (IEC 62453-41.2009, 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)

IEC 61131-3 Programmable Controllers Part 3. Programming Languages (Programmablecontrollers-Part 3.Pro-

programming languages)

IEC 61784-2 Industrial communication networks Part 2. Additional site for real-time networks based on the ISO /IEC 8802-3 standard

Bus specification (Industrial communication networks-Profiles-Part 2. Additional fieldbus profiles for real-time networks based on ISO /IEC 8802-3)

3.1 Terms and definitions

Terms and definitions GB/T 29618.1-2013 and GB/T 29618.2-2013 defined apply to this document.

3.2 Symbols and abbreviations

The symbols and abbreviations defined in GB/T 29618.1-2013 and GB/T 29618.2-2013 apply to this document.