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

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Field device integration - Part 3: Server

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Table of Contents

foreword

Introduction

1 Scope

2 Normative references

foreword

This document is in accordance with the provisions of GB/T 1.1-2020 "Guidelines for Standardization Work Part 1. Structure and Drafting Rules of Standardization Documents"

drafted.

This document is part 3 of GB/T 41771 "Field Device Integration". GB/T 41771 has published the following parts.

--- Part 1. Overview;

--- Part 2. Client;

--- Part 3. Server;

--- Part 4. Packages;

--- Part 5. Information model.

This document is equivalent to IEC 62769-3:2021 "Field Device Integration (FDI) Part 3. Servers".

The following editorial changes have been made to this document.

--- Change the name of this document to "Field Device Integration Part 3. Server".

Please note that some content of this document may be patented. The issuing agency of this document assumes no responsibility for identifying patents.

Introduction

Field device integration series standards are important technical standards to guide related activities such as industrial process measurement and control. GB/T 41771 aims to

Establish normative guidelines for equipment integration, and it is planned to consist of 15 parts.

--- Part 1. Overview. The purpose is to specify basic concepts such as the architecture of

field device integration.

--- Part 2.Client. The purpose is to specify device access services, host services, user interface plug-in services for field device integration clients.

related requirements such as software and user interface description.

--- Part 3.Server. The purpose is to specify the information model of the field device integration server, OPCUA services, communication, etc.

Require.

--- Part 4.Packages. The purpose is to build a field device integration package model that provides the integration of devices, network components and communication servers into

All elements required by the system.

--- Part 5.Information model. The purpose is to specify the topology of the automation system, which is used to describe the equipment and communication of the automation system.

Connect Network.

--- Part 6.Technical mapping. The purpose is to specify a technical mapping of the concepts described in Field Device Integration.

--- Part 7.Communication equipment. The purpose is to specify the elements that enable communication capabilities.

--- Part 8.Profile General Agreement. The purpose is to specify the required communication servers, gateways and devices described in the Field Device Integration Package.

Details of the general protocol.

--- Part 9.Profile FOUNDATION Fieldbus H1.The purpose is to specify the integrated communication of field devices for H1 fieldbus technology

regulation.

--- Part 10.Profile Foundation Fieldbus HSE. The purpose is to specify the field device integration communication of HSE fieldbus technology.

Belief rules.

--- Part 11.Profile PROFIBUS. The purpose is to define the field device integrated communication profile of PROFIBUS technology.

--- Part 12.Profile PROFINET. The purpose is to define the field device integration communication profile of PROFINET technology.

--- Part 13.Profile HART and WirelessHART. The purpose is to specify the characteristics of

HART and WirelessHART technologies

Field device integration communication profile.

--- Part 14.Profile Modbus-RTU. The purpose is to specify the field device integration communication profile of Modbus-RTU technology.

--- Part 15.Profile ISA100.The purpose is to specify the field device integrated communication profile of ISA100 technology.

Field Device Integration Part 3.Servers

1 Scope

This document specifies the requirements for FDI servers. The entire FDI architecture is shown in Figure 1.Architecture within the scope of this document

Components are represented in dark colors in the diagram.

This document applies to the integration of field devices in automation systems.

Figure 1 FDI Architecture Diagram

2 Normative references

The contents of the following documents constitute essential provisions of this document through normative references in the text. Among them, dated citations

documents, only the version corresponding to that date applies to this document; for undated references, the latest edition (including all amendments) applies to this document.

IEC 61804 (all parts) Function Blocks (FB) for Process Control and Electronic Device Description Language (EDDL) [Function

IEC 61804-4.2020 Function Blocks (FBs) of Process Control and Electrical Equipment Description Language (EDDL) Part 4.EDD Interpretation