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Field Device Integration (FDI) - Part 5: FDI Information Model

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 07/23

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Supersedes EN IEC 62769-5:2021

English Version

**Field Device Integration (FDI®) - Part 5: FDI Information Model
(IEC 62769-5:2023)**

Intégration des appareils de terrain (FDI®) - Partie 5:
Modèle d'Information FDI
(IEC 62769-5:2023)

Feldgeräteintegration (FDI®) - Teil 5: FDI-
Informationsmodell
(IEC 62769-5:2023)

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EN IEC 62769-5:2023 (E)**European foreword**

The text of document 65E/858/CDV, future edition 3 of IEC 62769-5, prepared by SC 65E "Devices and integration in enterprise systems" of IEC/TC 65 "Industrial-process measurement, control and automation" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 62769-5:2023.

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- | | |
|--------------------|--|
| IEC 61987 (series) | NOTE Approved as EN IEC 61987 (series) |
| IEC/TR 62541-1 | NOTE Approved as CLC IEC/TR 62541-1 |
| IEC 62541-7 | NOTE Approved as EN IEC 62541-7 |

Annex ZA (normative)

Normative references to international publications with their corresponding European publications

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

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<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 61784-1-3	2023	Industrial networks - Profiles - Part 1-3: EN IEC 61784-1-3 Fieldbus profiles - Communication Profile Family 3	EN IEC 61784-1-3	2023
IEC 61804-3	-	Devices and integration in enterprise systems - Function blocks (FB) for process control and electronic device description language (EDDL) - Part 3: EDDL syntax and semantics	EN IEC 61804-3	-
IEC 61804-4	-	Devices and integration in enterprise systems - Function blocks (FB) for process control and electronic device description language (EDDL) - Part 4: EDD interpretation	EN IEC 61804-4	-
IEC 62541-3	-	OPC Unified Architecture - Part 3: Address Space Model	EN IEC 62541-3	-
IEC 62541-4	-	OPC Unified Architecture - Part 4: Services	EN IEC 62541-4	-
IEC 62541-5	-	OPC Unified Architecture - Part 5: Information Model	EN IEC 62541-5	-
IEC 62541-6	-	OPC Unified Architecture - Part 6: Mappings	EN IEC 62541-6	-
IEC 62541-8	-	OPC Unified Architecture - Part 8: Data Access	EN IEC 62541-8	-
IEC 62541-100	-	OPC Unified Architecture - Part 100: Device Interface	EN 62541-100	-
IEC 62769-1	-	Field Device Integration (FDI®) - Part 1: Overview	EN IEC 62769-1	-
IEC 62769-2	-	Field Device Integration (FDI®) - Part 2: Client	EN IEC 62769-2	-
IEC 62769-3	-	Field Device Integration (FDI®) - Part 3: Server	EN IEC 62769-3	-
IEC 62769-4	-	Field Device Integration (FDI®) - Part 4: FDI Packages	EN IEC 62769-4	-
IEC 62769-6	-	Field Device Integration (FDI®) - Part 6: FDI Technology Mappings	EN IEC 62769-6	-
IEC 62769-7	-	Field Device Integration (FDI®) - Part 7: Communication Devices	EN IEC 62769-7	-

EN IEC 62769-5:2023 (E)

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 62769-1xx	series	Field device integration (FDI®) - Part 1xx-y: Profiles	-	-
OPC 10000-19	-	OPC Unified Architecture - Part 19: Dictionary Reference	-	-



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INTERNATIONAL STANDARD

NORME INTERNATIONALE



**Field device integration (FDI®) –
Part 5: FDI Information Model**

**Intégration des appareils de terrain (FDI®) –
Partie 5: Modèle d'Information FDI**





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INTERNATIONAL STANDARD

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**Field device integration (FDI®) –
Part 5: FDI Information Model**

**Intégration des appareils de terrain (FDI®) –
Partie 5: Modèle d'Information FDI**

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IEC 62769-5 has been prepared by subcommittee 65E: Devices and integration in enterprise systems, of IEC technical committee 65: Industrial-process measurement, control and automation. It is an International Standard.

This third edition cancels and replaces the second edition published in 2021. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

- a) added INTERACTIVE_TRANSFER_TO_DEVICE ACTION.

The text of this International Standard is based on the following documents:

Draft	Report on voting
65E/858/CDV	65E/915/RVC

Full information on the voting for its approval can be found in the report on voting indicated in the above table.

The language used for the development of this International Standard is English.

This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at www.iec.ch/members_experts/refdocs. The main document types developed by IEC are described in greater detail at www.iec.ch/publications.

A list of all parts in the IEC 62769 series, published under the general title *Field device integration (FDI®)*, can be found on the IEC website.

The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under webstore.iec.ch in the data related to the specific document. At this date, the document will be

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FIELD DEVICE INTEGRATION (FDI[®]) –

Part 5: FDI[®] Information Model

1 Scope

This part of IEC 62769 defines the FDI[®]¹ Information Model. One of the main tasks of the Information Model is to reflect the topology of the automation system. Therefore, it represents the devices of the automation system as well as the connecting communication networks including their properties, relationships, and the operations that can be performed on them. The types in the AddressSpace of the FDI[®] Server constitute some kind of catalogue, which is built from FDI[®] Packages.

The fundamental types for the FDI[®] Information Model are well defined in OPC UA for Devices (IEC 62541-100). The FDI[®] Information Model specifies extensions for a few special cases and otherwise explains how these types are used and how the contents are built from elements of DevicePackages.

The overall FDI[®] architecture is illustrated in Figure 1. The architectural components that are within the scope of this document have been highlighted in this illustration.

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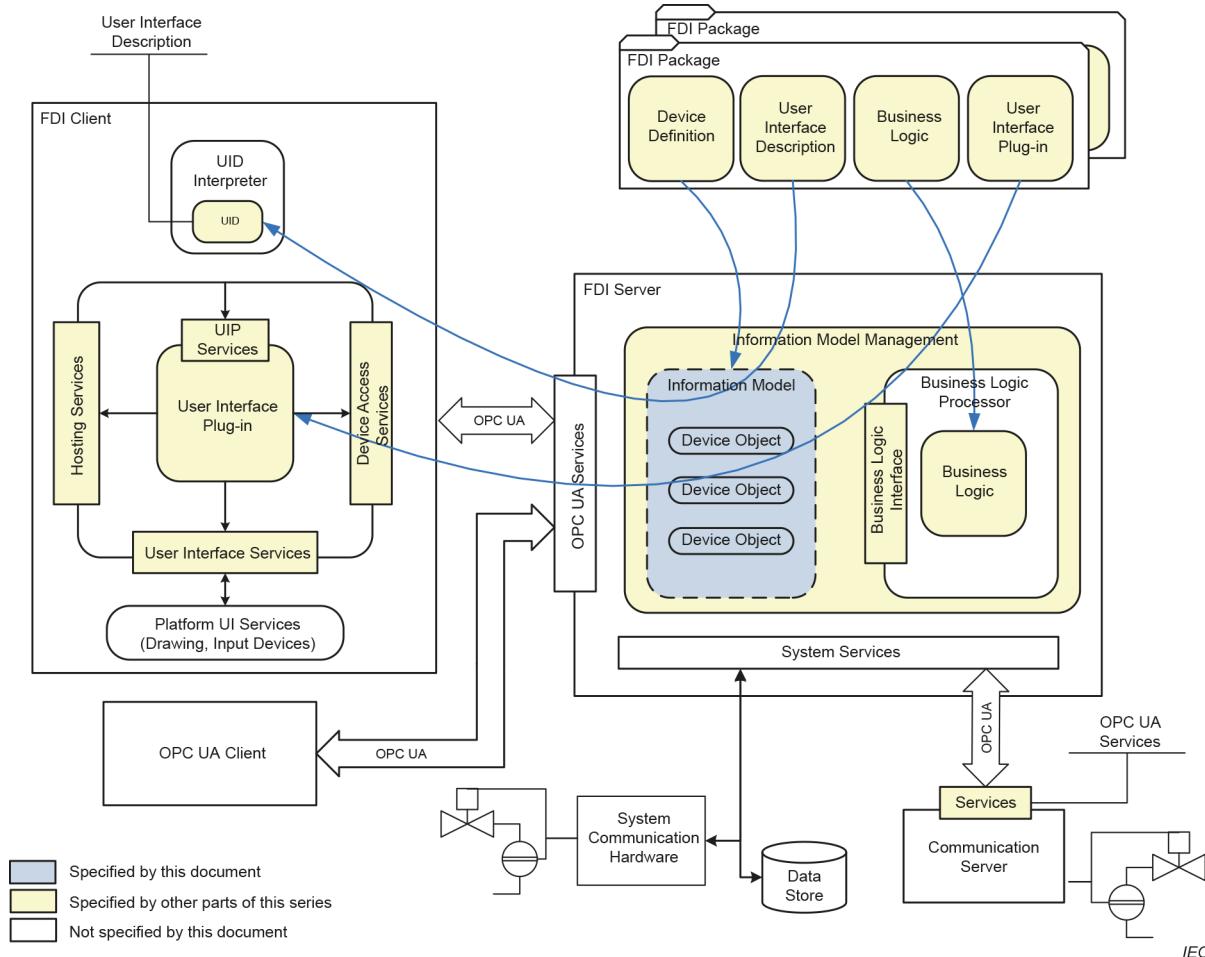


Figure 1 – FDI® architecture diagram

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 61784-1-3:2023, *Industrial networks – Profiles – Part 1-3: Fieldbus profiles – Communication Profile Family 3*

IEC 61804-3, *Devices and integration in enterprise systems – Function blocks (FB) for process control and electronic device description language (EDDL) – Part 3: EDDL syntax and semantics*

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IEC 62769-1, *Field Device Integration (FDI[®]) – Part 1: Overview*

IEC 62769-2, *Field Device Integration (FDI[®]) – Part 2: Client*

IEC 62769-3, *Field Device Integration (FDI[®]) – Part 3: Server*

IEC 62769-4, *Field Device Integration (FDI[®]) – Part 4: FDI[®] Packages*

IEC 62769-6, *Field Device Integration (FDI[®]) – Part 6: FDI[®] Technology Mappings*

IEC 62769-7, *Field Device Integration (FDI[®]) – Part 7: Communication Devices*

IEC 62769-1xx (all parts), *Field Device Integration (FDI[®]) – Part 1xx-y: Profiles*

OPC 10000-19, *OPC Unified Architecture – Part 19: Dictionary Reference*

koniec náhľadu – text d'alej pokračuje v platenej verzii STN