
**Vključitev procesne terenske naprave (FDI) - 100. del: Profili - Splošni protokoli
(IEC 62769-100:2020)**

Field device integration (FDI) - Part 100: Profiles - Generic protocols (IEC 62769-100:2020)

Feldgeräteintegration (FDI) - Teil 100: Profile - Allgemeine Protokolle (IEC 62769-100:2020)

Intégration des appareils de terrain (FDI) - Partie 100: Profils - Protocoles génériques (IEC 62769-100:2020)

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Field device integration (FDI) - Part 100: Profiles - Generic protocols (IEC 62769-100:2020)

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(IEC 62769-100:2020)

Feldgeräteintegration (FDI) - Teil 100: Profile - Allgemeine
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(IEC 62769-100:2020)

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Europäisches Komitee für Elektrotechnische Normung

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EN IEC 62769-100:2020 (E)**European foreword**

The text of document 65E/739/FDIS, future edition 1 of IEC 62769-100, 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 62769-100:2020.

The following dates are fixed:

- latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2021-07-29
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2023-10-29

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Endorsement notice

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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.

NOTE 1 Where an International Publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

NOTE 2 Up-to-date information on the latest versions of the European Standards listed in this annex is available here: www.cenelec.eu.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 61804	series	Function blocks (FB) for process control and electronic device description language (EDDL)	EN IEC 61804	series
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 62541-100	2015	OPC Unified Architecture - Part 100: Device Interface	EN 62541-100	2015
IEC 62769-2	-	Field Device Integration (FDI) - Part 2: FDI Client	-	-
IEC 62769-4	-	Field Device Integration (FDI) - Part 4: FDI Packages	-	-
IEC 62769-5	-	Field Device Integration (FDI) - Part 5: FDI Information Model	-	-
IEC 62769-7	-	Field Device Integration (FDI) - Part 7: FDI Communication Devices	-	-

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Field device integration (FDI) –
Part 100: Profiles – Generic protocols

Intégration des appareils de terrain (FDI) –
Partie 100: Profils – Protocoles génériques

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FIELD DEVICE INTEGRATION (FDI) –

Part 100: Profiles – Generic protocols

FOREWORD

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International Standard IEC 62769-100 has been prepared by subcommittee 65E: Devices and integration in enterprise systems, of IEC technical committee 65: Industrial-process measurement, control and automation.

FCG TS62769-100 Edition 1.1, *Field Device Integration Part 100: Profiles – Generic Protocols*, a specification of the FieldComm Group, PROFIBUS Nutzerorganisation e. V., OPC Foundation and FDT Group, serves as a basis for the elaboration of this standard.

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

FDIS	Report on voting
65E/739/FDIS	65E/743/RVD

Full information on the voting for the approval of this International Standard can be found in the report on voting indicated in the above table.

This document has been drafted in accordance with the ISO/IEC Directives, Part 2.

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 "<http://webstore.iec.ch>" in the data related to the specific document. At this date, the document will be

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

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FIELD DEVICE INTEGRATION (FDI) –

Part 100: Profiles – Generic protocols

1 Scope

This part of IEC 62769 specifies an FDI profile of IEC 62769 for generic protocols. That means that all interfaces are defined, and a host can add support for more protocols without changing its implementation. Nevertheless, there are some protocol-specific definitions (PSD) that need to be specified per protocol using this profile. Annex C specifies what PSDs need to be defined per protocol so that FDI Device Packages, FDI Communication Packages for Gateways and FDI Communication Servers, FDI Communication Servers, Gateways and Devices supporting such a protocol can work together in a host not aware about this specific protocol.

NOTE A host not using an FDI Communication Server but a proprietary mechanism for communication defines its own means to deal with this profile to support several protocols without changing its implementation. This is specific to the proprietary way how the communication driver is bound to the host.

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.

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IEC 61804 (all parts), *Function blocks (FB) for process control and Electronic Device Description Language (EDDL)*

IEC 61804-3, *Function blocks (FB) for process control and Electronic Device Description Language (EDDL) – Part 3: EDDL syntax and semantics*

IEC 62541-100:2015, *OPC Unified Architecture – Part 100: OPC UA for Devices*

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

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

IEC 62769-5, *Field Device Integration (FDI) – Part 5: FDI Information Model*

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

3 Terms, definitions, abbreviated terms and conventions

For the purposes of this document, the terms and definitions given in IEC 61804 series, IEC 62541-100, IEC 62769-2, IEC 62769-4, IEC 62769-5 and IEC 62769-7 apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at <http://www.electropedia.org/>
- ISO Online browsing platform: available at <http://www.iso.org/obp>

3.1 Abbreviated terms

EDD	electronic device description
EDDL	Electronic Device Description Language (see IEC 61804)
FDI™	Field Device Integration™ ¹
FCG	FieldComm Group
XML	Extensible Markup Language (see FCG TS62769-100, Edition 1.1, Field Device Integration Part 100: Profiles – Generic Protocols, available at https://fieldcommgroup.org)

3.2 Conventions

3.2.1 EDDL syntax

This document specifies content for the EDD component that is part of FDI Communication Packages. The specification content using EDDL syntax uses the font *Courier New*. The EDDL syntax is used for method signature, variable, data structure and component declarations.

3.2.2 XML syntax

XML syntax examples use the font *Courier New*. The XML syntax is used to describe XML document schema.

Example: `<xs:simpleType name="ExampleType">`

3.2.3 Capitalizations

The IEC 62769 series uses capitalized terms to emphasize that these terms have an FDI-specific meaning. <https://standards.iteh.ai/catalog/standards/sist/a0594268-c994-4be0-bdde-24ecdb98bd69/sist-en-iec-62769-100-2021>

Some of these terms use an initialism as a prefix, for example:

- FDI Client, or
- FDI Server.

Some of these terms are compound terms, such as:

- Communication Servers, or
- Profile Package.

Parameter names or attributes are concatenated into a single term, where the original terms start in this term with a capital letter, such as:

- ProtocolSupportFile or
- ProtocolType.

Parameter names or attributes can also be constructed by using an underscore character to concatenate two or more terms, such as:

- DEVICE_REV or
- DEVICE_MODEL

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