SLOVENSKI STANDARD
SIST EN IEC 62769-100:2021

01-februar-2021

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

Field device integration (FDI) - Part 100: Profiles - Generic protocolsi (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)

Ta slovenski standard je istoveten z: **EN IEC 62769-100:2020**

ICS:

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35.240.50	Uporabniške rešitve IT v industriji	IT applications in industry

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EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN IEC 62769-100

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English Version

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

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

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

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European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

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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- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2023-10-29

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CENELEC shall not be held responsible for identifying any or all such patent rights.

Endorsement notice

The text of the International Standard IEC 62769-100:2020 was approved by CENELEC as a European Standard without any modification.

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.

Publication	Year	Title	EN/HD	Year
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	-	-

IEC 62769-100

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INTERNATIONAL STANDARD

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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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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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FIELD DEVICE INTEGRATION (FDI) –

Part 100: Profiles – Generic protocols

FOREWORD

1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as "IEC Publication(s)"). Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
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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.

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.

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.

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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[1] Field Device Integration (FDI) is the trademark of a product supplied by FieldComm Group. This information is given for the convenience of users of this document and does not constitute an endorsement by IEC of the product named. Equivalent products may be used if they can be shown to lead to the same results.