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Integracija procesne naprave (FDI) - 4. del: Paketi FDI (IEC 62769-4:2021)

Field Device Integration (FDI) - Part 4: FDI Packages (IEC 62769-4:2021)

Feldgeräteintegration (FDI) - Teil 4: FDI-Packages (IEC 62769-4:2021)

Intégration des appareils de terrain (FDI) - Partie 4: Paquetages FDI (IEC 62769-4:2021)
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EUROPEAN STANDARD

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NORME EUROPÉENNE

EUROPÄISCHE NORM

March 2021

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Supersedes EN 62769-4:2015 and all of its amendments
and corrigenda (if any)

English Version

**Field Device Integration (FDI) - Part 4: FDI Packages
(IEC 62769-4:2021)**Intégration des appareils de terrain (FDI) - Partie 4:
Paquetages FDI
(IEC 62769-4:2021)Feldgeräteintegration (FDI) - Teil 4: FDI-Packages
(IEC 62769-4:2021)

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European Committee for Electrotechnical Standardization
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Europäisches Komitee für Elektrotechnische Normung

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

EN IEC 62769-4:2021 (E)**European foreword**

The text of document 65E/761/FDIS, future edition 2 of IEC 62769-4, 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 62769-4:2021.

The following dates are fixed:

- latest date by which the document has to be implemented at national (dop) 2021-12-12 level by publication of an identical national standard or by endorsement
- latest date by which the national standards conflicting with the (dow) 2024-03-12 document have to be withdrawn

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IEC 61784-1	NOTE	Harmonized as EN IEC 61784-1
IEC 61784-2	NOTE	Harmonized as EN IEC 61784-2
IEC 62591	NOTE	Harmonized as EN 62591
IEC 62769-2	NOTE	Harmonized as EN 62769-2
IEC 62769-3	NOTE	Harmonized as EN 62769-3
IEC 62769-5	NOTE	Harmonized as EN 62769-5
IEC 62769-7	NOTE	Harmonized as EN 62769-7

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.

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 61804-5	2015	Function blocks (FB) for process control and electronic device description language (EDDL) - Part 5: EDDL Built-in library	EN 61804-5	2015
IEC 62769-1	-	Field Device Integration (FDI) - Part 1: Overview	EN 62769-1	-
IEC 62769-6	-	Field Device Integration (FDI) - Part 6: Technology Mapping	EN 62769-6	-
ISO/IEC 29500-2	2016	Information technology - Document description and processing languages - Office Open XML File Formats - Part 2: Open Packaging Conventions	-	-
ISO 639-1	-	Codes for the representation of names of languages - Part 1: Alpha-2 code	-	-
ISO 32000-1	-	Document management - Portable document format - Part 1: PDF 1.7	-	-
Extensible Markup Language (XML) 1.0	-	W3C Recommendation, available at < http://www.w3.org/TR/REC-xml/ >	-	-
XML Schema Definition Language (XSD) 1.1	-	W3C Recommendation, available at < http://www.w3.org/TR/xmlschema11-1/ >	-	-
ETSI EN 319 132-1	-	Electronic Signatures and Infrastructures (ESI); XAdES digital signatures; Part 1: Building blocks and XAdES baseline signatures	-	-
ETSI TS 101 733	-	Electronic Signatures and Infrastructures (ESI); CMS Advanced Electronic Signatures (CAAdES)	-	-
FIPS 140-2	-	Security Requirements for Cryptographic Modules	-	-

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INTERNATIONAL STANDARD

NORME INTERNATIONALE



Field device integration (FDI) –
Part 4: FDI Packages

STANDARD PREVIEW
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Intégration des appareils de terrain (FDI) –
Partie 4: Paquetages FDI

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CONTENTS

FOREWORD.....	7
INTRODUCTION.....	9
1 Scope.....	10
2 Normative references	10
3 Terms, definitions, abbreviated terms and conventions.....	11
3.1 Terms and definitions.....	11
3.2 Abbreviated terms.....	12
3.3 Conventions.....	12
4 FDI Package Model	12
4.1 Overview.....	12
4.2 FDI Package Elements.....	14
4.2.1 Package Catalog	14
4.2.2 Electronic Device Description	14
4.2.3 User Interface Plug-in.....	14
4.2.4 Attachment	16
4.3 FDI Package Types.....	16
4.3.1 FDI Device Package	16
4.3.2 FDI Communication Package.....	17
4.3.3 FDI UIP Package.....	18
4.3.4 FDI Profile Package.....	18
5 FDI Package implementation	20
5.1 Packaging technology.....	20
5.2 Use of Open Packaging Conventions.....	20
5.2.1 Unknown parts.....	20
5.2.2 Invalid parts.....	20
5.2.3 Unknown relationships.....	20
5.2.4 Interleaving.....	20
5.2.5 Core properties.....	20
5.2.6 Thumbnails.....	20
5.2.7 Digital signatures.....	20
5.3 FDI Package Parts	21
5.3.1 Package Catalog	21
5.3.2 Electronic Device Description	22
5.3.3 User Interface Plug-in.....	22
5.3.4 Attachments	25
6 FDI Package Versioning	27
6.1 Version scheme	27
6.2 Versioned elements	28
6.3 Version Hierarchy	28
6.4 UIP Compatibility	30
7 Digital Signatures and Registration Certificates	31
7.1 Signed Elements and Certification documents.....	31
7.2 Signing mechanism.....	32
7.3 FDI Package Originator, FDI Registration Authority.....	33
7.4 FDI Host behavior.....	33

Annex A (normative) File name conventions	34
A.1 Identification	34
A.2 FDI Package filename convention	34
Annex B (informative) FDI Package Creation	35
B.1 General.....	35
B.2 Tools and Components	35
B.3 Development.....	35
Annex C (informative) FDI Package deployment	38
C.1 General.....	38
C.2 Scenarios	38
Annex D (informative) Example.....	41
D.1 General.....	41
D.2 Open Packaging Conventions	41
D.3 Creation and Handling of FDI Packages.....	44
D.4 FDI Device Package Example	44
Annex E (normative) Schema.....	52
E.1 Target Namespace.....	52
E.2 Catalog	52
E.3 ClassificationIdT	52
E.4 CommunicationProfileT	52
E.5 CommunicationRoleT	52
E.6 CommunicationServerT	53
E.7 DeviceTypeT	53
E.8 FdiRegistrationCert	54
E.9 FdiRegistrationCert	54
E.10 InterfaceT	55
E.11 ListOfCommunicationProfilesT	56
E.12 ListOfDeviceImagesT	57
E.13 ListOfDeviceTypesT	57
E.14 ListOfDocumentsT	57
E.15 ListOfInterfacesT	58
E.16 ListOfLocalizedStringsT	58
E.17 ListOfProtocolSupportFilesT	58
E.18 ListOfRegDeviceTypesT	59
E.19 ListOfRegistrationsT	59
E.20 ListOfSupportedDeviceRevisionsT	60
E.21 ListOfSupportedUipsT	60
E.22 ListOfUipVariantsT	60
E.23 LocalizedStringT	61
E.24 PackageT	61
E.25 PackageTypeT	62
E.26 PlatformT	63
E.27 RegDeviceTypeT	63
E.28 RegistrationT	64
E.29 RelationshipIdT	64
E.30 String256T	65
E.31 SupportedUipT	65
E.32 UipCatalog	65

E.33	UipStyleT	66
E.34	UipT	66
E.35	UipVariantT	67
E.36	UuidT	67
E.37	VersionSupportedT	68
E.38	VersionT	68
Annex F (normative) Communication protocol specific profiles		69
Annex G (informative) FDI Package life cycle use cases		70
G.1	New Device Type	70
G.2	Replacement of Device	70
G.3	Firmware enhancements	70
G.4	FDI Package life cycle polices	71
G.5	FDI Package update	71
G.6	FDI Package upgrade	71
G.7	FDI Package replacement/exchange	71
G.8	FDI Package uninstallation	71
Annex H (normative) Health Status Method		73
H.1	Background	73
H.2	Device Health Status model	73
H.3	Standard EDD Method signature	73
H.4	Performance considerations	74
Annex I (normative) Modular devices		75
I.1	Concept	75
I.2	EDDL usage profile	75
I.3	Processing recommendations	76
Annex J (normative) FDI Communication Packages for FDI Communication Server		78
J.1	General	78
J.2	Protocol Support File	78
J.3	CommunicationProfile definition	78
J.4	Profile Device	78
J.5	Protocol version information	78
J.6	Associating a Package with an FDI Communication Server	78
J.7	Handling of Catalog elements	78
J.8	Example	79
Annex K (normative) FDI Profile for EDDs		80
K.1	Overview	80
K.2	Entry Point to Online handling	80
K.3	Entry Point to Offline handling	80
K.4	Upload and Download	80
K.5	Initial Data Set	80
K.6	Method GetHealthStatus	80
K.7	Actions	80
K.8	Shared files	81
Bibliography		82
Figure 1 – FDI architecture diagram		10
Figure 2 – FDI Package Model		13
Figure 3 – Architectural mapping		13

Figure 4 – User Interface Plug-in Reference Model	15
Figure 5 – Multiple FDI Packages referencing a common UIP	16
Figure 6 – FDI Device Package.....	17
Figure 7 – FDI Communication Package	18
Figure 8 – FDI UIP Package	18
Figure 9 – FDI Profile Package	19
Figure 10 – Device Function and Parameter sets (type- and profile-specific)	19
Figure 11 – Catalog Element.....	21
Figure 12 – User Interface Plug-in	23
Figure 13 – UIP Catalog	24
Figure 14 – FDI Registration Certificate	27
Figure 15 – Version Hierarchy.....	29
Figure 16 – UIP Version Support concept	31
Figure 17 – FDI Package signing	32
Figure B.1 – Tools used for FDI Package development	36
Figure D.1 – Parts and relationships in a package	41
Figure D.2 – Creating an FDI Package with the content files	44
Figure D.3 – FDI Device Package Example.....	45
Figure D.4 – User Interface Plug-in Example (fancytrend.uip)	48
Figure I.1 – Modular device's package	75
STANDARD PREVIEW (standards.iteh.ai)	
Table 1 – UIP Platform.....	15
Table 2 – Package Catalog Part.....	21
Table 3 – EDD part	22
Table 4 – User Interface Plug-in part	23
Table 5 – UIP Catalog Part	24
Table 6 – UIP Variant Part	25
Table 7 – Image Part	25
Table 8 – Documentation Part.....	26
Table 9 – Protocol Support File Part	26
Table 10 – FDI Registration Certificate Part.....	26
Table 11 – Versioned Elements	28
Table 12 – Influence on FDI Package Version.....	29
Table A.1 – FDI Package Naming Convention.....	34
Table D.1 – Examples of standard MIME media types that can be used in FDI packages	43
Table D.2 – Examples of FDI custom MIME media types that can be used in FDI Packages.....	43
Table E.1 – Enumerations of CommunicationRoleT.....	53
Table E.2 – Elements of CommunicationServerT	53
Table E.3 – Elements of DeviceTypeT	54
Table E.4 – Elements of FdiRegistrationCertT.....	55
Table E.5 – Elements of InterfaceT	56
Table E.6 – Elements of ListOfCommunicationProfilesT	56

Table E.7 – Elements of ListOfDeviceImagesT.....	57
Table E.8 – Elements of ListOfDeviceTypesT	57
Table E.9 – Elements of ListOfDocumentsT	58
Table E.10 – Elements of ListOfInterfacesT	58
Table E.11 – Elements of ListOfLocalizedStringsT	58
Table E.12 – Elements of ListOfProtocolSupportFilesT	59
Table E.13 – Elements of ListOfRegDeviceTypesT	59
Table E.14 – Elements of ListOfRegistrationsT	60
Table E.15 – Elements of ListOfSupportedDeviceRevisionsT	60
Table E.16 – Elements of ListOfSupportedUipsT.....	60
Table E.17 – Elements of ListOfUipVariantsT.....	61
Table E.18 – Attributes of LocalizedStringT	61
Table E.19 – Elements of PackageT	62
Table E.20 – Enumerations of PackageTypeT.....	63
Table E.21 – Enumerations of PlatformT.....	63
Table E.22 – Elements of RegDeviceTypeT	64
Table E.23 – Elements of RegistrationT	64
Table E.24 – Elements of SupportedUipT.....	65
Table E.25 – Enumerations of UipStyleT.....	66
Table E.26 – Elements of UipT	67
Table E.27 – Elements of UipVariantT	67
Table F.1 – Communication protocol interest groups (alphabetical order).....	69
Table G.1– Device Replacement Guidelines.....	70
Table G.2 – Firmware enhancement guidelines.....	71
Table H.1 – Health Status State.....	73
Table J.1 – Catalog Mapping	78
Table J.2 – Handling of Catalog elements	78

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FIELD DEVICE INTEGRATION (FDI) –

Part 4: FDI Packages

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 62769-4 has been prepared by subcommittee 65E: Devices and integration in enterprise systems, of IEC technical committee 65: Industrial-process measurement, control and automation.

This second edition cancels and replaces the first edition published in 2015. This edition constitutes a technical revision.

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

- a) support for Package Developers to build EDDs targeted for today's EDD bases system under a single development tool;
- b) digital signature now includes trusted timestamping for long-term validation of FDI Package;
- c) time stamp for device package signature.

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

FDIS	Report on voting
65E/761/FDIS	65E/771/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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INTRODUCTION

The IEC 62769 series has the general title *Field Device Integration (FDI)* and the following parts:

- Part 1: Overview
- Part 2: FDI Client
- Part 3: FDI Server
- Part 4: FDI Packages
- Part 5: FDI Information Model
- Part 6: FDI Technology Mapping
- Part 7: FDI Communication Devices
- Part 100: Profiles – Generic Protocol Extensions
- Part 101-1: Profiles – Foundation Fieldbus H1
- Part 101-2: Profiles – Foundation Fieldbus HSE
- Part 103-1: Profiles – PROFIBUS
- Part 103-4: Profiles – PROFINET
- Part 109-1: Profiles – HART and WirelessHART
- Part 115-2: Profiles – Protocol-specific Definitions for Modbus RTU
- Part 150-1: Profiles – ISA 100.11a

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