



BSI Standards Publication

Field device Integration (FDI)

Part 101-1: Profiles — Foundation Fieldbus H1

National foreword

This British Standard is the UK implementation of EN IEC 62769-101-1:2021. It is identical to IEC 62769-101-1:2020. It supersedes BS EN 62769-101-1:2015, which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee GEL/65/3, Industrial communications: process measurement and control, including fieldbus.

A list of organizations represented on this committee can be obtained on request to its committee manager.

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Amendments/corrigenda issued since publication

Date	Text affected
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English Version

Field device Integration (FDI) - Part 101-1: Profiles - Foundation
Fieldbus H1
(IEC 62769-101-1:2020)

Intégration des appareils de terrain (FDI) - Partie 101-1:
Profils - Foundation Fieldbus H1
(IEC 62769-101-1:2020)

Feldgeräteintegration (FDI) - Teil 101-1: Profile -
Foundation Fieldbus H1
(IEC 62769-101-1:2020)

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

European foreword

The text of document 65E/620/CDV, future edition 2 of IEC 62769-101-1, 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 62769-101-1:2021.

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) 2021-09-24
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2023-12-24

This document supersedes EN 62769-101-1:2015 and all of its amendments and corrigenda (if any).

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Endorsement notice

The text of the International Standard IEC 62769-101-1:2020 was approved by CENELEC as a European Standard without any modification.

In the official version, for Bibliography, the following note has to be added for the standard indicated:

IEC 62769-3 NOTE Harmonized as EN 62769-3

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 61158-5-9	2014	Industrial communication networks - Fieldbus specifications - Part 5-9: Application layer service definition - Type 9 elements	EN 61158-5-9	2014
IEC 61784-1	-	Industrial communication networks - Profiles Part 1: Fieldbus profiles	EN IEC 61784-1	-
IEC 61784-2	-	Industrial communication networks - Profiles - Part 2: Additional fieldbus profiles for real-time networks based on ISO/IEC/IEEE 8802-3	EN IEC 61784-2	-
IEC 61784-3	2016	Industrial communication networks - Profiles - Part 3: Functional safety fieldbuses - General rules and profile definitions	EN 61784-3	2016
IEC 61804	series	Devices and integration in enterprise systems - Function blocks (FB) for process control and electronic device description language (EDDL)	EN IEC 61804	series
IEC 62541-6	-	OPC Unified Architecture - Part 6: Mappings	EN IEC 62541-6	-
IEC 62541-100	2015	OPC Unified Architecture - Part 100: Device Interface	EN 62541-100	2015
IEC 62769-1	-	Field device integration (FDI) - Part 1: Overview	EN 62769-1	-
IEC 62769-2	-	Field Device Integration (FDI) - Part 2: FDI Client	EN 62769-2	-

EN IEC 62769-101-1:2021 (E)

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 62769-4	-	Field Device Integration (FDI) - Part 4: FDI Packages	EN 62769-4	-
IEC 62769-5	-	Field Device Integration (FDI) - Part 5: FDI Information Model	EN 62769-5	-
IEC 62769-6	-	Field Device Integration (FDI) - Part 6: FDI Technology Mapping	EN 62769-6	-
IEC 62769-7	-	Field Device Integration (FDI) - Part 7: FDI Communication Devices	EN 62769-7	-

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

FIELD DEVICE INTEGRATION (FDI) –

Part 101-1: Profiles – Foundation Fieldbus H1

FOREWORD

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International Standard IEC 62769-101-1 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 generic protocol extension for faster adoption of other technologies;
- b) support for Package developers to build EDDs targeted for today's EDD bases system under a single development tool.

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

CDV	Report on voting
65E/620/CDV	65E/683/RVC

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 101-1: Profiles – Foundation Fieldbus H1

1 Scope

This part of IEC 62769 specifies the IEC 62769 profile for IEC 61784-1_CP 1/1 (FOUNDATION™ Fieldbus H1)¹.

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 61158-5-9:2014, *Industrial communication networks – Fieldbus specifications – Part 5-9: Application layer service definition – Type 9 elements*

IEC 61784-1, *Industrial communication networks – Profiles – Part 1: Fieldbus Profiles*

IEC 61784-2, *Industrial communication networks – Profiles – Part 2: Additional fieldbus profiles for real-time networks based on ISO/IEC/IEEE 8802-3*

IEC 61784-3:2016, *Industrial communication networks – Profiles – Part 3: Functional safety fieldbuses – General rules and profile definitions*

IEC 61804 (all parts), *Function blocks (FB) for process control and electronic device description language (EDDL)*

IEC 62541-6, *OPC unified architecture – Part 6: Mappings*

IEC 62541-100:2015, *OPC unified architecture – Part 100: Device Interface*

IEC 62769-1, *Field device integration (FDI) – Part 1: Overview*

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 62769-6, *Field Device Integration (FDI) – Part 6: FDI Technology Mapping*

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

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