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Field Device Integration (FDI) - Part 101-1: Profiles ÔÇô Foundation Fieldbus H1

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. 11/15

Obsahuje: EN 62769-101-1:2015, IEC 62769-101-1:2015

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Úrad pre normalizáciu, metrológiu a skúšobníctvo SR, 2015  
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EUROPEAN STANDARD

**EN 62769-101-1**

NORME EUROPÉENNE

EUROPÄISCHE NORM

July 2015

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English Version

**Field Device Integration (FDI) - Part 101-1: Profiles - Foundation  
Fieldbus H1  
(IEC 62769-101-1:2015)**

Intégration des appareils de terrain (FDI) - Partie 101-1:  
Profils - Foundation Fieldbus H1  
(IEC 62769-101-1:2015)

Feldgeräteintegration (FDI) - Teil 101-1: Profile -  
Foundation Fieldbus H 1  
(IEC 62769-101-1:2015)

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## **Foreword**

The text of document 65E/352/CDV, future edition 1 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 62769-101-1:2015.

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- latest date by which the document has to be implemented at (dop) 2016-03-23 national level by publication of an identical national standard or by endorsement
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In the official version, for Bibliography, the following note has to be added for the standard indicated :

IEC 62769-3:2015

NOTE Harmonized as EN 62769-3<sup>1)</sup>.

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1) To be published.

**Annex ZA**  
(normative)

**Normative references to international publications  
with their corresponding European publications**

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

NOTE 1 When 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](http://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 61784-1	-
IEC 61784-2	-	Industrial communication networks Profiles - Part 2: Additional fieldbus profiles for real-time networks based on ISO/IEC 8802-3	-EN 61784-2	-
IEC 61784-3	2010	Industrial communication networks Profiles -- Part 3: Functional safety fieldbuses - General rules and profile definitions	-EN 61784-3	2010
IEC 61804	series	Function Blocks (FB) for process control	EN 61804	series
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	2015	Field Device Integration (FDI) - Part 4: FDI-Packages		-
IEC 62769-5	2015	Field Device Integration (FDI) - Part 5: FDI-Information Model		-
IEC 62769-6	-	Field Device Integration (FDI) - Part 6: FDI-Technology Mapping		-



# INTERNATIONAL STANDARD

## NORME INTERNATIONALE

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**Field Device Integration (FDI) –  
Part 101-1: Profiles – Foundation Fieldbus H1**

**Intégration des appareils de terrain (FDI) –  
Partie 101-1: Profils – Foundation Fieldbus H1**





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# INTERNATIONAL STANDARD

# NORME INTERNATIONALE

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**Field Device Integration (FDI) –  
Part 101-1: Profiles – Foundation Fieldbus H1**

**Intégration des appareils de terrain (FDI) –  
Partie 101-1: Profils – Foundation Fieldbus H1**

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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.

The text of this standard is based on the following documents:

CDV	Report on voting
65E/352/CDV	65E/415/RVD

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

This publication 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 publication will remain unchanged until the stability date indicated on the IEC website under "http://webstore.iec.ch" in the data related to the specific publication. At this date, the publication will be

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## INTRODUCTION

The International Electrotechnical Commission (IEC) draws attention to the fact that it is claimed that compliance with this document may involve the use of patents concerning

- a) Method for the Supplying and Installation of Device-Specific Functionalities, see Patent Family DE10357276;
- b) Method and device for accessing a functional module of automation system, see Patent Family EP2182418;
- c) Methods and apparatus to reduce memory requirements for process control system software applications, see Patent Family US2013232186;
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## FIELD DEVICE INTEGRATION (FDI) –

### Part 101-1: Profiles – Foundation Fieldbus H1

## 1 Scope

This part of IEC 62769 specifies an FDI profile of IEC 62769 for IEC 61784-1\_Cp 1/1 (FOUNDATION™ Fieldbus H1)<sup>1</sup>.

## 2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. 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 8802-3*

IEC 61784-3:2010, *Industrial communication networks - Profiles - Part 3: Functional safety fieldbuses - General rules and profile definitions*

IEC 61804 (all parts), *Function blocks (FB) for process control*

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

NOTE IEC 62769-1 is technically identical to FDI-2021.

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

NOTE IEC 62769-2 is technically identical to FDI-2022.

IEC 62769-4:2015, *Field Device Integration (FDI) – Part 4: FDI Packages*

NOTE IEC 62769-4 is technically identical to FDI-2024.

IEC 62769-5:2015, *Field Device Integration (FDI) – Part 5: FDI Information Model*

NOTE IEC 62769-5 is technically identical to FDI-2025.

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

NOTE IEC 62769-6 is technically identical to FDI-2026.

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<sup>1</sup> FOUNDATION™ Fieldbus is the trade name of the non-profit consortium Fieldbus Foundation. This information is given for the convenience of users of this standard and does not constitute an endorsement by IEC of the trademark holder or any of its products. Compliance does not require use of the trade name. Use of the trade name requires permission of the trade name holder.

IEC 62769-7:2015–, *Field Device Integration (FDI) – Part 7: FDI Communication Devices*

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