



NSAI
Standards

Irish Standard
I.S. EN IEC 62769-7:2021

Field Device Integration (FDI) - Part 7: Communication devices

I.S. EN IEC 62769-7:2021

Incorporating amendments/corrigenda/National Annexes issued since publication:

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National Foreword

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EN IEC 62769-7

NORME EUROPÉENNE

EUROPÄISCHE NORM

March 2021

ICS 25.040.40; 35.100.05

Supersedes EN 62769-7:2015 and all of its amendments
and corrigenda (if any)

English Version

Field Device Integration (FDI) - Part 7: Communication devices (IEC 62769-7:2021)

Intégration des appareils de terrain (FDI) - Partie 7:
Appareils de communication
(IEC 62769-7:2021)

Feldgeräteintegration (FDI) - Teil 7: FDI-
Kommunikationsgeräte
(IEC 62769-7:2021)

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EN IEC 62769-7:2021 (E)

European foreword

The text of document 65E/764(F)/FDIS, future edition 2 of IEC 62769-7, 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 62769-7:2021.

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<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
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 61804-4	-	Devices and integration in enterprise systems - Function blocks (FB) for process control and electronic device description language (EDDL) - Part 4: EDD interpretation	EN IEC 61804-4	-
IEC 62541	series	OPC Unified Architecture	EN IEC 62541	series
IEC 62769-1	-	Field Device Integration (FDI) - Part 1: Overview	EN IEC 62769-1	-
IEC 62769-2	-	Field Device Integration (FDI) - Part 2: FDI Client	EN IEC 62769-2	-
IEC 62769-3	-	Field Device Integration (FDI) - Part 3: Server	EN IEC 62769-3	-
IEC 62769-4	2021	Field Device Integration (FDI) - Part 4: FDI Packages	EN IEC 62769-4	2021
IEC 62769-5	-	Field Device Integration (FDI) - Part 5: Information Model	EN IEC 62769-5	-

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INTERNATIONAL STANDARD

NORME INTERNATIONALE



**Field device integration (FDI) –
Part 7: Communication devices**

**Intégration des appareils de terrain (FDI) –
Partie 7: Appareils de communication**





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IEC 62769-7

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INTERNATIONAL STANDARD

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**Field device integration (FDI) –
Part 7: Communication devices**

**Intégration des appareils de terrain (FDI) –
Partie 7: Appareils de communication**

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FIELD DEVICE INTEGRATION (FDI) –

Part 7: Communication devices

FOREWORD

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International Standard IEC 62769-7 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 of new protocols;
- c) generic protocol extension to allow adoption of other communication protocols;
- d) based on generic protocol extension: Modbus RTU.

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

FDIS	Report on voting
65E/764/FDIS	65E/774/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 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

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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

FIELD DEVICE INTEGRATION (FDI) – Part 7: Communication devices

1 Scope

This part of IEC 62769 specifies the elements implementing communication capabilities called Communication Devices (IEC 62769-5).

The overall FDI architecture is illustrated in Figure 1. The architectural components that are within the scope of this document have been highlighted in this illustration. The document scope with respect to FDI Packages is limited to Communication Devices. The Communication Server shown in Figure 1 is an example of a specific Communication Device.

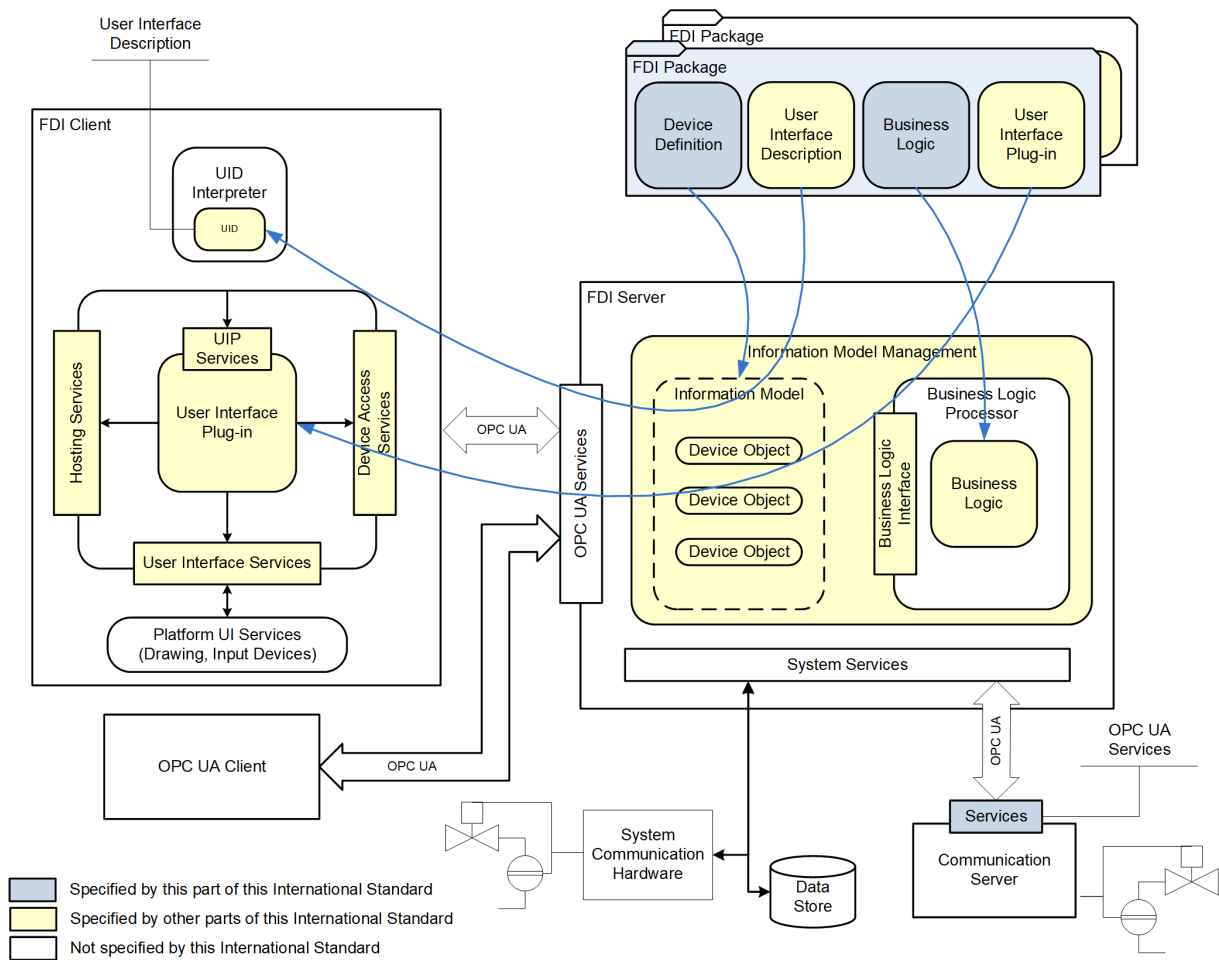


Figure 1 – FDI architecture diagram

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