

Field Device Integration (FDI) - Part 3: FDI Server

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NATIONAL FOREWORD

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English Version

**Devices and integration in enterprise systems; Field Device
Integration - Part 3: FDI Server
(IEC 62769-3:2015)**

Les dispositifs et leur intégration dans les systèmes de
l'entreprise; Intégration des appareils de terrain (FDI) -
Partie 3: Serveur FDI
(IEC 62769-3:2015)

Feldgeräteintegration (FDI) - Teil 3: FDI-Server
(IEC 62769-3:2015)

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European foreword

The text of document 65E/346/CDV, future edition 1 of IEC 62769-3, 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 62769-3:2015.

The following dates are fixed:

- latest date by which the document has to be (dop) 2016-03-24
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publication of an identical national
standard or by endorsement
- latest date by which the national (dow) 2018-06-24
standards conflicting with the
document have to be withdrawn

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In the official version, for Bibliography, the following notes have to be added for the standards indicated:

IEC 61804-5	NOTE	Harmonized as EN 61804-5 ¹⁾
IEC 62769-6	NOTE	Harmonized as EN 62769-6

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.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 61804	series	Function Blocks (FB) for process control	EN 61804	series
IEC 61804-3	-	Function blocks (FB) for process control and EDDL - Part 3: EDDL specification and communication profiles	-	-
IEC 61804-4	-	Function blocks (FB) for process control -- Part 4: EDD interpretation	-	-
IEC 62541-4	-	OPC Unified Architecture - Part 4: Services	EN 62541-4	-
IEC 62541-7	-	OPC unified architecture - Part 7: Profiles	EN 62541-7	-
IEC 62541	series	OPC unified architecture	EN 62541	series
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 62769-7	-	Field Device Integration (FDI) - Part 7: FDI - Communication Devices	-	-

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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;
- d) extensible device object model, see Patent Family US12/893,680.

IEC takes no position concerning the evidence, validity and scope of this patent right.

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Part 3: FDI Server

This part of IEC 62769 specifies the FDI Server. 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 figure.



Figure 1 – FDI architecture diagram

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 61804 (all parts), *Function blocks (FB) for process control and Electronic Device Description Language (EDDL)*

IEC 61804-3¹, *Function block (FB) for process control and Electronic Device Description Language (EDDL) – Part 3: EDDL syntax and semantics*

IEC 61804-4², *Function blocks (FB) for process control and Electronic Device Description Language (EDDL) – Part 4: EDD interpretation*

IEC 62541 (all parts), *OPC unified architecture*

IEC 62541-4, *OPC unified architecture –Part 4: Services*

IEC 62541-7, *OPC unified architecture – Part 7: Profiles*

IEC 62769-1, *Field Device Integration – Part 1: Overview*

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

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

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

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

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

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

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

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

NOTE IEC 62769-7 is technically identical to FDI-2027.

3 Terms, definitions, abbreviated terms and acronyms

3.1 Terms and definitions

For the purposes of this document, the terms and definitions given in IEC 62769-1 as well as the following apply.

3.1.1

Actions Proxy

internal FDI Server entity that encapsulates all the EDD Methods specified in an EDD Action definition

3.2 Abbreviated terms and acronyms

For the purposes of this document, the abbreviated terms and acronyms given in IEC 62769-1 apply.

4 Overview

The structure for an FDI Server is shown in Figure 1.

¹ To be published.

² To be published.