IEC 62769-150-1

Edition 2.0 2023-04

INTERNATIONAL STANDARD

NORME INTERNATIONALE

Field device integration (FDI)® – Part 150-1: Profiles – ISA100

Intégration des appareils de terrain (FDI)® – Partie 150-1: Profils – ISA100



IEC 62769-150-1:2023-04(en-fr)



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CONTENTS

FOREWORD 4
1 Scope 6
2 Normative references 6
3 Terms, definitions, abbreviated terms and acronyms 7
3.1 Terms and definitions 7
3.2 Abbreviated terms and acronyms 7
4 Conventions 7
4.1 EDDL syntax 7
4.2 XML syntax 7
4.3 Capitalizations 8
5 Profile for ISA100 WIRELESS 8
5.1 General 8
5.2 Catalog profile 8
5.2.1 Protocol support file 8
5.2.2 CommunicationProfile definition 9
5.2.3 Profile device 9
5.2.4 Protocol version information 9
5.3 Associating a Package with a device 9
5.3.1 Device type identification mapping 9
5.3.2 Device type revision mapping 10
5.4 Information Model mapping 10
5.4.1 ProtocolType definition 10
5.4.2 DeviceType mapping 11
5.4.3 FunctionalGroup identification definition 11
5.4.4 BlockType property mapping 11
5.4.5 Mapping to Object ParameterSet 12
5.5 Topology elements 12
5.5.1 ConnectionPoint definition 12
5.5.2 Communication Device definition 14
5.5.3 Communication service provider definition 15
5.5.4 Network definition 16
5.6 Methods 17
5.6.1 Methods for FDI® Communication Servers 17
5.6.2 Methods for Gateways 21
Annex A (normative) Topology Scan result schema 22
A.1 General 22
A.2 Target Namespace 22
A.3 Network 22
A.4 ISA100_WirelessNetworkT 22
A.5 ISA100_WirelessConnectionPointT 23
A.6 ISA100_WirelessIdentificationT 23
A.7 ISA100_WirelessAddressT 24
A.8 ISA_WirelessObjIdentificationT 24
Annex B (normative) Transfer service parameters 26
B.1 General 26
B.2 sendData 26

B.3 receiveData 26
B.4 TransferSendDataT 26
B.5 OperationT 27
B.6 TransferResultDataT 27
Bibliography 28

Table 1 – Capability file part 8
Table 2 – Protocol Version Information 9
Table 3 – Device identification information mapping 10
Table 4 – Device type catalog mapping 10
Table 5 – Protocol type ISA100 WIRELESS 11
Table 6 – Inherited DeviceType property mapping 11
Table 7 – ISA100 Wireless Device Types identification attributes 11
Table 8 – Inherited BlockType property mapping 12
Table 9 – ConnectionPointType ConnnectionPoint_ISA100_Wireless definition 13
Table 10 – Method Connect arguments 17
Table 11 – Method Disconnect arguments 18
Table 12 – Method Transfer arguments 19
Table 13 – Method GetPublishedData arguments 20
Table A.1 – Elements of ISA100_WirelessNetworkT 22
Table A.2 – Elements of ISA100_WirelessConnectionPointT 23
Table A.3 – Attributes of ISA100_WirelessIdentificationT 24
Table A.4 – Attributes of ISA100_WirelessObjIdentificationT 25
Table B.1 – Attributes of TransferSendDataT 27
Table B.2 – Enumerations of OperationT 27
Table B.3 – Attributes of TransferResultDataT 27

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FIELD DEVICE INTEGRATION (FDI®) –

Part 150-1: Profiles – ISA100

FOREWORD

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IEC 62769-150-1 has been prepared by subcommittee 65E: Devices and integration in enterprise systems, of IEC technical committee 65: Industrial-process measurement, control and automation. It is an International Standard.

This second edition cancels and replaces the first edition published in 2021. This edition constitutes a technical revision.

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

a) added namespace to Annex A.

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

Draft	Report on voting
65E/866/CDV	65E/923/RVC

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

The language used for the development of this International Standard is English.

This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at www.iec.ch/members_experts/refdocs. The main document types developed by IEC are described in greater detail at www.iec.ch/standardsdev/publications.

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 150-1: Profiles – ISA100

1 Scope

This part of IEC 62769 specifies an FDI®[1] profile of IEC 62769 for IEC 62734 (ISA100.11a)[2].

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 62734:2014*: Industrial networks – Wireless communication network and communication profiles – ISA 100.11a*

IEC 61804 (all parts), *Devices and integration in enterprise systems – Function blocks (FB) for process control and electronic device description language (EDDL)*

IEC TR 62541-2, *OPC unified architecture – Part 2: Security Model*

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

IEC 62734:2014*, Industrial networks – Wireless communication network and communication profiles – ISA 100.11a*

IEC 62769-4, *Field device integration (FDI®) – Part 4: FDI® Packages*

IEC 62769-5, *Field device integration (FDI®) – Part 5: Information Model*

IEC 62769-6, *Field device integration (FDI®) – Part 6: Technology Mapping*

IEC 62769-7, *Field device integration (FDI®) – Part 7: Communication devices*

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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 61804 (all parts), IEC TR 62541-2, IEC 62541-100, IEC 62734, IEC 62769-4, IEC 62769-5, IEC 62769-7 and the following apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at http://www.electropedia.org/
- ISO Online browsing platform: available at http://www.iso.org/obp

3.1.1
Object
basic entity which defines standardized behavior and features in a ISA100 WIRELESS device

3.2 Abbreviated terms and acronyms

For the purposes of this specification, the following abbreviations apply.

EDD	Electronic Device Description
EDDL	Electronic Device Description Language (see IEC 61804 (all parts))
FDI®	Field Device Integration
FCG	FieldComm Group
XML	Extensible markup language (see REC-xml-20081126)
CFF	Common file format
UAP	User Application Process
UAPMO	User Application Process Management Object
DMO	Device Management Object
IM	Information Model
SM	System Manager
WCI	Wireless Compliance Institute
CP	Communication profile

4 Conventions

4.1 EDDL syntax

This part of IEC 62769 specifies content for the EDD component that is part of FDI® Communication Packages. The specification content using EDDL syntax uses the font `Courier New`. The EDDL syntax is used for method signature, variable, data structure and component declarations.

4.2 XML syntax

XML syntax examples use font `Courier New`. The XML syntax is used to describe XML document schema.

Example: `<xs:simpleType name="ExampleType">`