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Field device integration (FDI) – Part 101-1: Profiles – Foundation Fieldbus H1

INTERNATIONAL ELECTROTECHNICAL COMMISSION

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FIELD DEVICE INTEGRATION (FDI) –

Part 101-1: Profiles – Foundation Fieldbus H1

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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.

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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~~ the IEC 62769 profile for IEC 61784-1_CP 1/1 (FOUNDATION™ Fieldbus H1)[1].

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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:~~2010~~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: ~~OPC UA for Devices~~ Device Interface*

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

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

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

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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*

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~~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.~~

IEC 62769-7~~:42015~~, *Field Device Integration (FDI) – Part 7: FDI Communication Devices*

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NORME INTERNATIONALE

Field device integration (FDI) – Part 101-1: Profiles – Foundation Fieldbus H1

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



IEC 62769-101-1:2020-11(en-fr)

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FIELD DEVICE INTEGRATION (FDI) –

Part 101-1: Profiles – Foundation Fieldbus H1

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Partie 101-1: Profils – Foundation Fieldbus H1

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Cette deuxième édition annule et remplace la première édition parue en 2015. Cette édition constitue une révision technique.

Cette édition inclut les modifications techniques majeures suivantes par rapport à l'édition précédente:

a) prise en charge d'extensions de protocoles génériques, pour une adoption plus rapide d'autres technologies;
b) capacité offerte aux développeurs de Paquetages d'élaborer des EDD ciblant les systèmes actuels de bases EDD, en exploitant un seul outil de développement.

Le texte de cette Norme internationale est issu des documents suivants:

CDV	Rapport de vote
65E/620/CDV	65E/683/RVC

Le rapport de vote indiqué dans le tableau ci-dessus donne toute information sur le vote ayant abouti à l'approbation de cette Norme internationale.

Ce document a été rédigé selon les Directives ISO/IEC, Partie 2.

Une liste de toutes les parties de la série IEC 62769, publiées sous le titre général *Intégration des appareils de terrain (FDI)*, peut être consultée sur le site web de l'IEC.

Le comité a décidé que le contenu de ce document ne sera pas modifié avant la date de stabilité indiquée sur le site web de l'IEC sous "http://webstore.iec.ch" dans les données relatives au document recherché. A cette date, le document sera

- reconduit,
- supprimé,
- remplacé par une édition révisée, ou
- amendé.

INTÉGRATION DES APPAREILS DE TERRAIN (FDI) –

Partie 101-1: Profils – Foundation Fieldbus H1

1 Domaine d'application

La présente partie de l'IEC 62769 spécifie le profil de l'IEC 62769 pour le profil de communication CP 1/1 (FOUNDATION™ Fieldbus H1)[1] défini dans l'IEC 61784-1.

2 Références normatives

Les documents suivants cités dans le texte constituent, pour tout ou partie de leur contenu, des exigences du présent document. Pour les références datées, seule l'édition citée s'applique. Pour les références non datées, la dernière édition du document de référence s'applique (y compris les éventuels amendements).

IEC 61158-5-9:2014, *Réseaux de communication industriels – Spécifications des bus de terrain – Partie 5-9: Définition des services de la couche application – Eléments de type 9*

IEC 61784-1, *Réseaux de communication industriels – Profils – Partie 1: Profils de bus de terrain*

IEC 61784-2, *Réseaux de communication industriels – Profils – Partie 2: Profils de bus de terrain supplémentaires pour les réseaux en temps réel fondés sur l'ISO/IEC/IEEE 8802-3*

IEC 61784-3:2016, *Réseaux de communication industriels – Profils – Partie 3: Bus de terrain de sécurité fonctionnelle – Règles générales et définitions de profils*

IEC 61804 (toutes les parties), *Blocs fonctionnels (FB) pour les procédés industriels et langage de description électronique de produit (EDDL)*

IEC 62541-6, *Architecture unifiée OPC – Partie 6: Correspondances*

IEC 62541-100:2015, *Architecture unifiée OPC – Partie 100: Interface d'appareils*

IEC 62769-1, *Intégration des appareils de terrain (FDI) – Partie 1: Vue d'ensemble*

IEC 62769-2, *Intégration des appareils de terrain (FDI) – Partie 2: Client FDI*

IEC 62769-4, *Intégration des appareils de terrain (FDI) – Partie 4: Paquetages FDI*

IEC 62769-5, *Intégration des appareils de terrain (FDI) – Partie 5: Modèle d'Information FDI*

IEC 62769-6, *Intégration des appareils de terrain (FDI) – Partie 6: Mapping de technologies FDI*

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[1] FOUNDATION™ Fieldbus est l'appellation commerciale du consortium Fieldbus Foundation, une organisation à but non lucratif. Cette information est donnée à l'intention des utilisateurs du présent document et ne signifie nullement que l'IEC approuve ou recommande l'organisation détentrice de l'appellation commerciale, ni un quelconque de ses produits. La conformité n'exige pas l'utilisation de l'appellation commerciale. L'utilisation de l'appellation commerciale exige l'autorisation du détenteur de l'appellation commerciale.

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