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colour inside

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

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FIELD DEVICE INTEGRATION (FDI®) –

Part 101-1: Profiles – Foundation Fieldbus H1

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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. It is an International Standard.

This third edition cancels and replaces the second edition published in 2020. This edition constitutes a technical revision.

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

a) updated Transfer service;
b) added OPERATION “GETOD” and “GETDEVICETYPEINFO”;
c) added DeviceTag and Block_Index to FoundationIdentificationT and Target;
d) removed arguments “BlockTag” and “ServiceId”;
e) changed content type of CFF file to application/vnd.ff.cff.

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

Draft	Report on voting
65E/860/CDV	65E/917/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.

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FIELD DEVICE INTEGRATION (FDI®) –

Part 101-1: Profiles – Foundation Fieldbus H1

1 Scope

This part of IEC 62769 specifies ~~the IEC 62769~~ an FDI®[1] profile of IEC 62769 for IEC 61784-1_CP 1/1 (FOUNDATION™ Fieldbus H1)[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 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~~/IEEE~~ 8802-3*

IEC 61784-3:~~2016~~2021, *Industrial communication networks – Profiles – Part 3: Functional safety fieldbuses – General rules and profile definitions*

IEC 61804 (all parts), *Devices and integration in enterprise systems – 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: Device Interface*

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

IEC 62769-2, *Field device integration (FDI®) – Part 2: ~~FDI~~ Client*

IEC 62769-3, *Field device integration (FDI®) – Part 3: Server*

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

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

IEC 62769-101-1

Edition 3.0 2023-04

INTERNATIONAL STANDARD

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 62769-101-1:2023-04(en-fr)

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FIELD DEVICE INTEGRATION (FDI®) –

Part 101-1: Profiles – Foundation Fieldbus H1

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FIELD DEVICE INTEGRATION (FDI®) –

Part 101-1: Profiles – Foundation Fieldbus H1

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

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Partie 101-1: Profils – Foundation Fieldbus H1

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Cette troisième édition annule et remplace la deuxième édition parue en 2020. Cette édition constitue une révision technique.

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

a) mise à jour du service Transfer;
b) ajout d'OPERATION "GETOD" et "GETDEVICETYPEINFO";
c) ajout de DeviceTag et Block_Index à FoundationIdentificationT et Target;

d) retrait des arguments "BlockTag" et "ServiceId";

e) modification du type de contenu des fichiers CFF par application/vnd.ff.cff.

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

Projet	Rapport de vote
65E/860/CDV	65E/917/RVC

Le rapport de vote indiqué dans le tableau ci-dessus donne toute information sur le vote ayant abouti à son approbation.

La langue employée pour l'élaboration de cette Norme internationale est l'anglais.

Ce document a été rédigé selon les Directives ISO/IEC, Partie 2, il a été développé selon les Directives ISO/IEC, Partie 1 et les Directives ISO/IEC, Supplément IEC, disponibles sous www.iec.ch/members_experts/refdocs. Les principaux types de documents développés par l'IEC sont décrits plus en détail sous www.iec.ch/standardsdev/publications.

Une liste de toutes les parties de la série IEC 62769, publiées sous le titre général *Intégration des appareils de terrain (FDI®)*, se trouve 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 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 un profil FDI®[1] de l'IEC 62769 pour le profil de communication CP 1/1 (FOUNDATION™ Fieldbus H1)[2] défini dans l'IEC 61784-1.

2 Références normatives

Les documents suivants sont cités dans le texte de sorte qu'ils 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 basés sur l'ISO/CEI 8802-3*

IEC 61784-3:2021, *Réseaux de communication industriels – Profils – Partie 3: Bus de terrain de sécurité fonctionnelle – Règles générales et définitions de profils*

IEC 61804 (toutes les parties), *Les dispositifs et leur intégration dans les systèmes de l'entreprise – Blocs fonctionnels (FB) pour les procédés industriels et le langage de description électronique de produits (EDDL)*

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

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

IEC 62769-3*, Intégration des appareils de terrain (FDI®) – Partie 3: Serveur*

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*

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1 FDI est une marque déposée de l'organisation à but non lucratif Fieldbus Foundation, Inc. Cette information est donnée à l'intention des utilisateurs du présent document et ne signifie nullement que l'IEC approuve le détenteur de la marque ou l'emploi de ses produits. La conformité n'exige pas l'utilisation de la marque. L'utilisation de la marque exige l'autorisation du détenteur de la marque.

2 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 rapport technique et ne signifie nullement que l'IEC approuve le détenteur des appellations commerciales ou l'emploi 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 62769-6, *Intégration des appareils de terrain (FDI®) – Partie 6: Mapping de technologies*

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