



NSAI
Standards

Irish Standard
I.S. EN IEC 61784-5-21:2018

Industrial communication networks - Profiles - Part 5-21: Installation of fieldbuses - Installation profiles for CPF 21

I.S. EN IEC 61784-5-21:2018

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National Foreword

I.S. EN IEC 61784-5-21:2018 is the adopted Irish version of the European Document EN IEC 61784-5-21:2018, Industrial communication networks - Profiles - Part 5-21: Installation of fieldbuses - Installation profiles for CPF 21

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EUROPEAN STANDARD

EN 61784-5-21

NORME EUROPÉENNE

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December 2018

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English Version

**Industrial communication networks - Profiles - Part 5-21:
Installation of fieldbuses - Installation profiles for CPF 21
(IEC 61784-5-21:2018)**

Réseaux de communication industriels - Profils - Partie 5-
21: Installation des bus de terrain - Profils d'installation pour
CPF 21
(IEC 61784-5-21:2018)

Industrielle Kommunikationsnetze - Profile - Teil 5-21:
Feldbusinstallation - Installationsprofile für die
Kommunikationsprofilfamilie 21
(IEC 61784-5-21:2018)

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European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

EN IEC 61784-5-21:2018 (E)

European foreword

The text of document 65C/924/FDIS, future edition 1 of IEC 61784-5-21, prepared by SC 65C "Industrial networks" 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 61784-5-21:2018.

The following dates are fixed:

- latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2019-07-04
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Annex ZA (normative)

Normative references to international publications with their corresponding European publications

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.

NOTE 1 Where 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 61918	2018	Industrial communication networks - Installation of communication networks in industrial premises	EN IEC 61918	2018

The normative references of EN IEC 61918:2018, Clause 2, apply.

NOTE For profile specific normative references, see Clause A.2.

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IEC 61784-5-21

Edition 1.0 2018-08

INTERNATIONAL STANDARD



**Industrial communication networks – Profiles –
Part 5-21: Installation of fieldbuses – Installation profiles for CPF 21**





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IEC 61784-5-21

Edition 1.0 2018-08

INTERNATIONAL STANDARD



**Industrial communication networks – Profiles –
Part 5-21: Installation of fieldbuses – Installation profiles for CPF 21**

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

**INDUSTRIAL COMMUNICATION NETWORKS –
PROFILES –**
**Part 5-21: Installation of fieldbuses –
Installation profiles for CPF 21**
FOREWORD

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International Standard IEC 61784-5-21 has been prepared by subcommittee 65C: Industrial networks, of IEC technical committee 65: Industrial-process measurement, control and automation.

This document is to be used in conjunction with IEC 61918:2018.

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

FDIS	Report on voting
65C/924/FDIS	65C/925/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 of IEC 61784-5 series, under the general title *Industrial communications networks – Profiles – Installation of fieldbuses*, 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 web site 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.

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INTRODUCTION

This International Standard is one of a series produced to facilitate the use of communication networks in industrial control systems.

IEC 61918:2018 provides the common requirements for the installation of communication networks in industrial control systems. This installation profile document provides the installation profiles of the communication profiles (CP) of a specific communication profile family (CPF) by stating which requirements of IEC 61918 fully apply and, where necessary, by supplementing, modifying, or replacing the other requirements (see Figure 1).

For general background on fieldbuses, their profiles, and relationship between the installation profiles specified in this document, see IEC 61158-1.

Each CP installation profile is specified in a separate annex of this document. Each annex is structured exactly as the reference standard IEC 61918 for the benefit of the persons representing the roles in the fieldbus installation process as defined in IEC 61918 (planner, installer, verification personnel, validation personnel, maintenance personnel, administration personnel). By reading the installation profile in conjunction with IEC 61918, these persons immediately know which requirements are common for the installation of all CPs and which are modified or replaced. The conventions used to draft this document are defined in Clause 5.

The provision of the installation profiles in one document for each CPF (for example IEC 61784-5-21 for CPF 21), allows readers to work with documents of a convenient size.

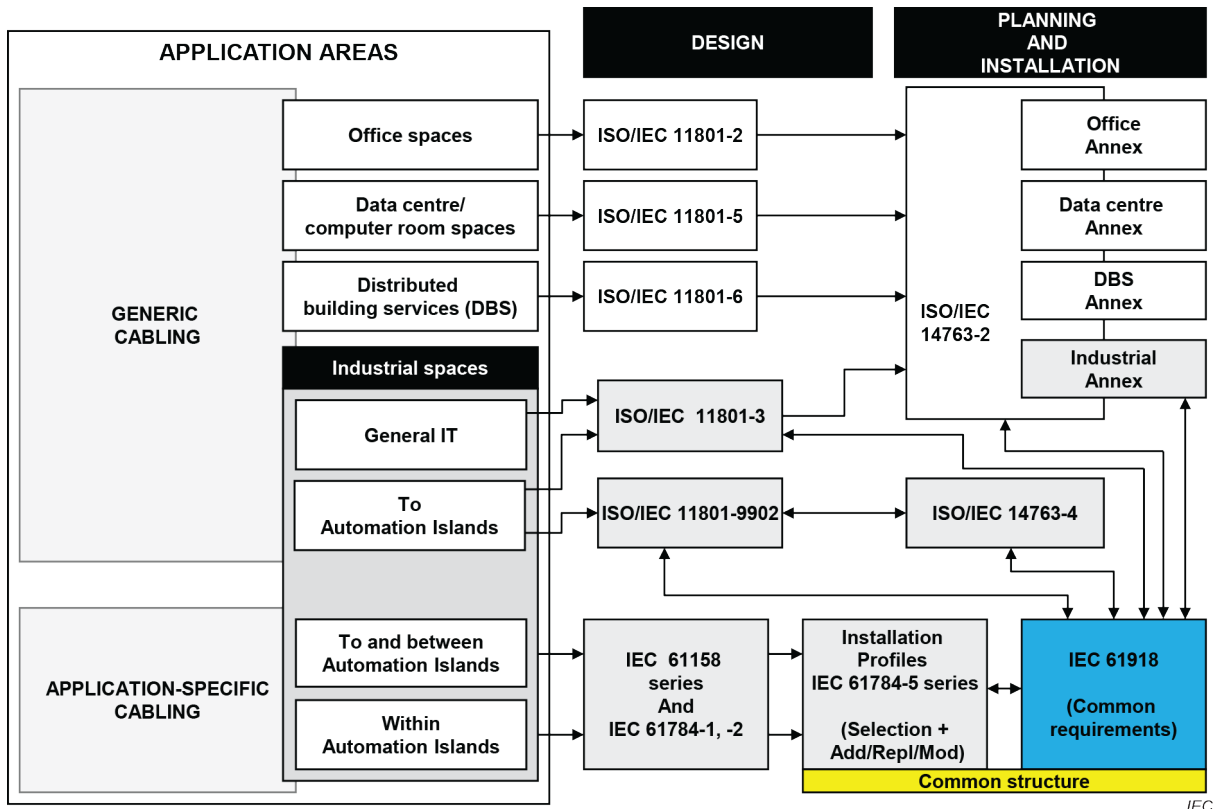


Figure 1 – Standards relationships

INDUSTRIAL COMMUNICATION NETWORKS – PROFILES –

Part 5-21: Installation of fieldbuses – Installation profiles for CPF 21

1 Scope

This part of IEC 61784 specifies the installation profile for CPF 21 (FL-net¹).

The installation profile is specified in Annex A. The annex is read in conjunction with IEC 61918:2018.

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 61918:2018, *Industrial communication networks – Installation of communication networks in industrial premises*

The normative references of IEC 61918:2018, Clause 2, apply.

NOTE For profile specific normative references, see Clause A.2.

3 Terms, definitions and abbreviated terms

For the purposes of this document, the terms, definitions and abbreviated terms given in IEC 61918:2018, Clause 3, 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>

4 CPF 21: Overview of installation profiles

CPF 21 consists of one communication profile as specified in IEC 61784-2.

The installation requirements for CP 21/1 (FL-net) are specified in Annex A.

¹ FL-net is the trade name of JEMA/FL-net: The Japan Electrical Manufacturers' Association / the Factory Automation Link network. This information is given for the convenience of users of this document and does not constitute an endorsement by IEC of the trademark holder or any of its products. Compliance does not require use of the trade name. Use of the trade name requires permission of the trade name holder.

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