# ILNAS

## Institut luxembourgeois de la normalisation de l'accréditation, de la sécurité et qualité des produits et services

## ILNAS-EN IEC 61784-2-15:2023

**Industrial networks - Profiles - Part 2-15: Additional real-time fieldbus profiles based on ISO/IEC/IEEE 8802-3 - CPF 15**

Industrielle Kommunikationsnetze - Profile - Teil 2-15: Zusätzliche Feldbusprofile für Echtzeitnetzwerke basierend auf ISO/IEC/IEEE 8802-3 -

Réseaux industriels   Profils   Partie 2-15: Profils de bus de terrain supplémentaires pour les réseaux en temps réel fondés sur ● ISO/IEC/IEEE 8802-3   CPF 15

**06/2023**

**National Foreword**

This European Standard EN IEC 61784-2-15:2023 was adopted as Luxembourgish Standard ILNAS-EN IEC 61784-2-15:2023.

Every interested party, which is member of an organization based in Luxembourg, can participate for FREE in the development of Luxembourgish (ILNAS), European (CEN, CENELEC) and International (ISO, IEC) standards:

- Participate in the design of standards
- Foresee future developments
- Participate in technical committee meetings

https://portail-qualite.public.lu/fr/normes-normalisation/participer-normalisation.html

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

# EN IEC 61784-2-15

June 2023

ICS 35.100.20; 35.240.50

Supersedes EN IEC 61784-2:2019 (partially)

English Version

## Industrial networks - Profiles - Part 2-15: Additional real-time fieldbus profiles based on ISO/IEC/IEEE 8802-3 - CPF 15 (IEC 61784-2-15:2023)

Réseaux industriels - Profils - Partie 2-15: Profils de bus de terrain supplémentaires pour les réseaux en temps réel fondés sur l'ISO/IEC/IEEE 8802-3 - CPF 15 (IEC 61784-2-15:2023)

Industrielle Kommunikationsnetze - Profile - Teil 2-15: Zusätzliche Feldbusprofile für Echtzeitnetzwerke basierend auf ISO/IEC/IEEE 8802-3 - Kommunikationsprofilfamilie (CPF) 15 (IEC 61784-2-15:2023)

This European Standard was approved by CENELEC on 2023-06-09. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CENELEC member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Türkiye and the United Kingdom.

**CENELEC**

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**

Ref. No. EN IEC 61784-2-15:2023 E

## European foreword

The text of document 65C/1209/FDIS, future edition 1 of IEC 61784-2-15, 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 61784-2-15:2023.

The following dates are fixed:

- latest date by which the document has to be implemented at national (dop) 2024-03-09 level by publication of an identical national standard or by endorsement

- latest date by which the national standards conflicting with the (dow) 2026-06-09 document have to be withdrawn

This document partially supersedes EN IEC 61784-2:2019 and all of its amendments and corrigenda (if any).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CENELEC shall not be held responsible for identifying any or all such patent rights.

Any feedback and questions on this document should be directed to the users' national committee. A complete listing of these bodies can be found on the CENELEC website.

## Endorsement notice

The text of the International Standard IEC 61784-2-15:2023 was approved by CENELEC as a European Standard without any modification.

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

IEC 61158-1          NOTE  Approved as EN IEC 61158-1

IEC 61784-1 (series)   NOTE  Approved as EN IEC 61784-1 (series)

IEC 61784-1-0         NOTE  Approved as EN IEC 61784-1-0

IEC 61784-2 (series)   NOTE  Approved as EN IEC 61784-2 (series)

IEC 61918            NOTE  Approved as EN IEC 61918

# 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.cencenelec.eu.

| Publication | Year | Title | EN/HD | Year |
|---|---|---|---|---|
| IEC 61158 | series | Industrial communication networks - Fieldbus specifications | EN IEC 61158 | series |
| IEC 61158-5-15 | 2010 | Industrial communication networks - Fieldbus specifications - Part 5-15: Application layer service definition - Type 15 elements | EN 61158-5-15 | 2012 |
| IEC 61158-6-15 | 2010 | Industrial communication networks - Fieldbus specifications - Part 6-15: Application layer protocol specification - Type 15 elements | EN 61158-6-15 | 2012 |
| IEC 61784-2-0 | 2023 | Industrial networks - Profiles - Part 2-0: Additional real-time fieldbus profiles based on ISO/IEC/IEEE 8802-3 - General concepts and terminology | EN IEC 61784-2-0 | 2023 |
| ISO/IEC/IEEE 8802-3 | - | Telecommunications and exchange between information technology systems - Requirements for local and metropolitan area networks - Part 3: Standard for Ethernet | - | - |
| IEEE Std 802 | 2014 | IEEE Standard for Local and Metropolitan Area Networks: Overview and Architecture | - | - |
| IEEE Std 802.1AB | 2016 | IEEE Standard for Local and metropolitan area networks: Station and Media Access Control Connectivity Discovery | - | - |
| IEEE Std 802.1AS | 2020 | IEEE Standard for Local and Metropolitan Area Networks - Timing and Synchronization for Time-Sensitive Applications | - | - |
| IEEE Std 802.1Q | 2018 | IEEE Standard for Local and Metropolitan Area Networks - Bridges and Bridged Networks | - | - |
| IETF RFC 768 | 1980 | User Datagram Protocol | - | - |
| IETF RFC 791 | 1981 | Internet Protocol | - | - |
| IETF RFC 792 | 1981 | Internet Control Message Protocol | - | - |
| IETF RFC 793 | 1981 | Transmission Control Protocol | - | - |

| Publication | Year | Title | EN/HD | Year |
|---|---|---|---|---|
| IETF RFC 1305 | 1992 | Network Time Protocol (Version 3) - Specification, Implementation and Analysis | - | - |
| IETF RFC 2988 | 2000 | Computing TCP's Retransmission Timer | - | - |

![IEC logo]

# IEC 61784-2-15

Edition 1.0    2023-05

# INTERNATIONAL STANDARD

# NORME INTERNATIONALE

**Industrial networks – Profiles –**
**Part 2-15: Additional real-time fieldbus profiles based on ISO/IEC/IEEE 8802-3 – CPF 15**

**Réseaux industriels – Profils –**
**Partie 2-15: Profils de bus de terrain supplémentaires pour les réseaux en temps réel fondés sur l'ISO/IEC/IEEE 8802-3 – CPF 15**

# CONTENTS