



Institut luxembourgeois de la normalisation
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ILNAS-EN IEC 61784-2:2019

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

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

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

05/2019



National Foreword

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**Industrial communication networks - Profiles - Part 2: Additional
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8802-3
(IEC 61784-2:2019)**

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 61784-2:2019)

Industrielle Kommunikationsnetze - Profile - Teil 2:
Zusätzliche Feldbusprofile für Echtzeitnetzwerke basierend
auf ISO/IEC 8802-3
(IEC 61784-2:2019)

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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

European foreword

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- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2022-05-15

This document supersedes EN 61784-2:2014.

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

ISO/IEC 9646 (series)

NOTE

Harmonized as EN ISO/IEC 9646 (series)

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 61158	series	Industrial communication networks - Fieldbus specifications	-	series
IEC 61158-1	2019	Industrial communication networks - Fieldbus specifications - Part 1: Overview and guidance for the IEC 61158 and IEC 61784 series	EN IEC 61158-1	2019
IEC 61158-2	2014	Industrial communication networks - Fieldbus specifications - Part 2: Physical layer specification and service definition	EN 61158-2	2014
IEC 61158-3-2	2014	Industrial communication networks - Fieldbus specifications - Part 3-2: Data-link layer service definition - Type 2 elements	EN 61158-3-2	2014
IEC 61158-3-4	2019	Industrial communication networks - Fieldbus specifications - Part 3-4: Data-link layer service definition - Type 4 elements	EN IEC 61158-3-4	2019
IEC 61158-3-11	2007	Industrial communication networks - Fieldbus specifications - Part 3-11: Data-link layer service definition - Type 11 elements	EN 61158-3-11	2008
IEC 61158-3-12	2019	Industrial communication networks - Fieldbus specifications - Part 3-12: Data-link layer service definition - Type 12 elements	-	-
IEC 61158-3-13	2014	Industrial communication networks - Fieldbus specifications - Part 3-13: Data link layer service definition - Type 13 elements	EN 61158-3-13	2014
IEC 61158-3-14	2014	Industrial communication networks - Fieldbus specifications - Part 3-14: Data-link layer service definition - Type 14 elements	EN 61158-3-14	2014
IEC 61158-3-17	2007	Industrial communication networks - Fieldbus specifications - Part 3-17: Data-link layer service definition - Type 17 elements	EN 61158-3-17	2008
IEC 61158-3-19	2019	Industrial communication networks - Fieldbus specifications - Part 3-19: Data-link layer service definition - Type 19 elements	EN IEC 61158-3-19	2019
IEC 61158-3-21	2019	Industrial communication networks - Fieldbus specifications - Part 3-21: Data-link layer service definition - Type 21 elements	EN IEC 61158-3-21	2019

IEC 61158-3-22	2014	Industrial communication networks - Fieldbus specifications - Part 3-22: Data-link layer service definition - Type 22 elements	EN 61158-3-22	2014
IEC 61158-3-25	2019	Industrial communication networks - Fieldbus specifications - Part 3-25: Data-link layer service definition - Type X elements	EN IEC 61158-3-25	2019
IEC 61158-4-2	2019	Industrial communication networks - Fieldbus specifications - Part 4-2: Data-link layer protocol specification - Type 2 elements	EN IEC 61158-4-2	2019
IEC 61158-4-4	2019	Industrial communication networks - Fieldbus specifications - Part 4-4: Data-link layer protocol specification - Type 4 elements	EN IEC 61158-4-4	2019
IEC 61158-4-11	2014	Industrial communication networks - Fieldbus specifications - Part 4-11: Data-link layer protocol specification - Type 11 elements	EN 61158-4-11	2014
IEC 61158-4-12	2019	Industrial communication networks - Fieldbus specifications - Part 4-12: Data-link layer protocol specification - Type 12 elements	EN IEC 61158-4-12	2019
IEC 61158-4-13	2014	Industrial communication networks - Fieldbus specifications - Part 4-13: Data-link layer protocol specification - Type 13 elements	EN 61158-4-13	2014
IEC 61158-4-14	2014	Industrial communication networks - Fieldbus specifications - Part 4-14: Data-link layer protocol specification - Type 14 elements	EN 61158-4-14	2014
IEC 61158-4-17	2007	Industrial communication networks - Fieldbus specifications - Part 4-17: Data-link layer protocol specification - Type 17 elements	EN 61158-4-17	2008
IEC 61158-4-19	2019	Industrial communication networks - Fieldbus specifications - Part 4-19: Data-link layer protocol specification - Type 19 elements	EN IEC 61158-4-19	2019
IEC 61158-4-21	2019	Industrial communication networks - Fieldbus specifications - Part 4-21: Data-link layer protocol specification - Type 21 elements	EN IEC 61158-4-21	2019
IEC 61158-4-22	2014	Industrial communication networks - Fieldbus specifications - Part 4-22: Data-link layer protocol specification - Type 22 elements	EN 61158-4-22	2014
IEC 61158-4-25	2019	Industrial communication networks - Fieldbus specifications - Part 4-25: Data-link layer protocol specification - Type 25 elements	EN IEC 61158-4-25	2019
IEC 61158-5-2	2019	Industrial communication networks - Fieldbus specifications - Part 5-2: Application layer service definition - Type 2 elements	EN IEC 61158-5-2	2019
IEC 61158-5-4	2019	Industrial communication networks - Fieldbus specifications - Part 5-4: Application layer service definition - Type 4 elements	EN IEC 61158-5-4	2019
IEC 61158-5-10	2019	Industrial communication networks - Fieldbus specifications - Part 5-10: Application layer service definition - Type 10 elements	EN IEC 61158-5-10	2019
IEC 61158-5-11	2007	Industrial communication networks - Fieldbus specifications - Part 5-11: Application layer service definition - Type 11 elements	EN 61158-5-11	2008
IEC 61158-5-12	2019	Industrial communication networks - Fieldbus specifications - Part 5-12: Application layer service definition - Type 12 elements	EN IEC 61158-5-12	2019
IEC 61158-5-13	2014	Industrial communication networks - Fieldbus specifications - Part 5-13: Application layer service definition - Type 13 elements	EN 61158-5-13	2014

IEC 61158-5-14	2014	Industrial communication networks - Fieldbus specifications - Part 5-14: Application layer service definition - Type 14 elements	EN 61158-5-14	2014
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 61158-5-17	2007	Industrial communication networks - Fieldbus specifications - Part 5-17: Application layer service definition - Type 17 elements	EN 61158-5-17	2008
IEC 61158-5-19	2019	Industrial communication networks - Fieldbus specifications - Part 5-19: Application layer service definition - Type 19 elements	EN IEC 61158-5-19	2019
IEC 61158-5-21	2019	Industrial communication networks - Fieldbus specifications - Part 5-21: Application layer service definition - Type 21 elements	EN IEC 61158-5-21	2019
IEC 61158-5-22	2014	Industrial communication networks - Fieldbus specifications - Part 5-22: Application layer service definition - Type 22 elements	EN 61158-5-22	2014
IEC 61158-5-23	2019	Industrial communication networks - Fieldbus specifications - Part 5-23: Application layer service definition - Type 23 elements	EN IEC 61158-5-23	2019
IEC 61158-5-25	2019	Industrial communication networks - Fieldbus specifications - Part 5-25: Application layer service definition - Type 25 elements	EN IEC 61158-5-25	2019
IEC 61158-5-26	2019	Industrial communication networks - Fieldbus specifications - Part 5-26: Application layer service definition - Type 26 elements	EN IEC 61158-5-26	2019
IEC 61158-6-2	2019	Industrial communication networks - Fieldbus specifications - Part 6-2: Application layer protocol specification - Type 2 elements	EN IEC 61158-6-2	2019
IEC 61158-6-4	2019	Industrial communication networks - Fieldbus specifications - Part 6-4: Application layer protocol specification - Type 4 elements	EN IEC 61158-6-4	2019
IEC 61158-6-10	2019	Industrial communication networks - Fieldbus specifications - Part 6-10: Application layer protocol specification - Type 10 elements	-	-
IEC 61158-6-11	2007	Industrial communication networks - Fieldbus specifications - Part 6-11: Application layer protocol specification - Type 11 elements	EN 61158-6-11	2008
IEC 61158-6-12	2019	Industrial communication networks - Fieldbus specifications - Part 6-12: Application layer protocol specification - Type 12 elements	EN IEC 61158-6-12	2019
IEC 61158-6-13	2014	Industrial communication networks - Fieldbus specifications - Part 6-13: Application layer protocol specification - Type 13 elements	EN 61158-6-13	2014
IEC 61158-6-14	2014	Industrial communication networks - Fieldbus specifications - Part 6-14: Application layer protocol specification - Type 14 elements	EN 61158-6-14	2014
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
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IEC 61588	2009	Precision clock synchronization protocol for networked measurement and control systems	-	-
IEC 61784-1	2019	Industrial communication networks - Profiles - Part 1: Fieldbus profiles	-	-
IEC 61784-5-2	2018	Industrial communication networks - Profiles - Part 5-2: Installation of fieldbuses - Installation profiles for CPF 2	EN IEC 61784-5-2	2018
IEC 61784-5-3	2018	Industrial communication networks - Profiles - Part 5-3: Installation of fieldbuses - Installation profiles for CPF 3	EN IEC 61784-5-3	2018
IEC 61784-5-6	2018	Industrial communication networks - Profiles - Part 5-6: Installation of fieldbuses - Installation profiles for CPF 6	EN IEC 61784-5-6	2018
IEC 61784-5-8	2018	Industrial communication networks - Profiles - Part 5-8: Installation of fieldbuses - Installation profiles for CPF 8	EN IEC 61784-5-8	2018
IEC 61784-5-11	2013	Industrial communication networks - Profiles - Part 5-11: Installation of fieldbuses - Installation profiles for CPF 11	EN 61784-5-11	2013
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IEC 61800	series	Adjustable speed electrical power drive systems	EN IEC 61800	series
IEC 61918	2018	Industrial communication networks - Installation of communication networks in industrial premises	EN IEC 61918	2018
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IEC 62439-2	-	Industrial communication networks - High availability automation networks - Part 2: Media Redundancy Protocol (MRP)	EN 62439-2	-
ISO/IEC 7498-1	-	Information technology - Open Systems Interconnection - Basic Reference Model: The Basic Model	-	-
ISO/IEC 8802-2	-	Information technology - Telecommunications and information exchange between systems - Local and metropolitan area networks - Specific requirements - Part 2: Logical link control	-	-
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ISO/IEC 8802-11	-	Information technology - Telecommunications and information exchange between systems - Local and metropolitan area networks - Specific requirements-- Part 11: Wireless LAN Medium Access Control (MAC) and Physical Layer (PHY) specifications	-	-
ISO/IEC 9834-8	-	Information technology - Procedures for the operation of object identifier registration authorities - Part 8: Generation of universally unique identifiers (UUIDs) and their use in object identifiers	-	-
ISO/IEC 11801	2002	Information technology - Generic cabling for customer premises	-	-
+ 1	2008		-	-
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ISO 15745-3	-	Industrial automation systems and integration - Open systems application integration framework -- Part 3: Reference description for IEC 61158 based control systems	-	-
ISO 15745-4	2003	Industrial automation systems and integration - Open systems application integration framework - Part 4: Reference description for Ethernet-based control systems	-	-
+ A1	2006		-	-
IEEE 802	2001	Local and metropolitan area networks: Overview and architecture	-	-
IEEE 802.1AB	-	IEEE Standard for Local and metropolitan area networks - Station and Media Access Control Connectivity Discovery	-	-
IEEE 802.1AS	-	IEEE Standard for Local and Metropolitan Area Networks - Timing and Synchronization for Time-Sensitive Applications in Bridged Local Area Networks	-	-
IEEE 802.1D	2004	IEEE Standard for local and metropolitan area networks - Media Access Control (MAC) Bridges	-	-
IEEE 802.1Q	-	IEEE Standard for Local and metropolitan area networks - Bridges and Bridged Networks	-	-
IEEE 802.11	-	IEEE Standard for Information technology - Telecommunications and information exchange between systems - Local and metropolitan area networks - Specific requirements - Part 11: Wireless LAN Medium Access Control (MAC) and Physical Layer (PHY) specifications	-	-
IEEE 802.15.1	-	IEEE Standard for Information technology - Telecommunications and information exchange between systems - Local and metropolitan area networks - Specific requirements - Part 15.1: Wireless medium access control (MAC) and physical layer (PHY) specifications for wireless personal area networks (WPANs)	-	-
IETF RFC 768	-	User Datagram Protocol	-	-
IETF RFC 791	-	INTERNET PROTOCOL DARPA INTERNET PROGRAM PROTOCOL SPECIFICATION	-	-
IETF RFC 792	-	Internet Control Message Protocol	-	-

IETF RFC 793	-	TRANSMISSION CONTROL PROTOCOL - DARPA INTERNET PROGRAM PROTOCOL SPECIFICATION	-
IETF RFC 826	-	Ethernet Address Resolution Protocol: Or Converting Network Protocol Addresses to 48.bit Ethernet Address for Transmission on Ethernet Hardware	-
IETF RFC 894	-	Standard for the Transmission of IP Datagrams over Ethernet Networks	-
IETF RFC 919	-	Broadcasting Internet Datagrams	-
IETF RFC 922	-	Broadcasting Internet datagrams in the presence of subnets	-
IETF RFC 950	-	Internet Standard Subnetting Procedure	-
IETF RFC 1034	-	Domain names - concepts and facilities	-
IETF RFC 1112	-	Host Extensions for IP multicasting	-
IETF RFC 1122	-	Requirements for Internet Hosts - Communication Layers	-
IETF RFC 1123	-	Requirements for Internet Hosts - Application and Support	-
IETF RFC 1127	-	A Perspective on the Host Requirements RFCs	-
IETF RFC 1157	-	Simple Network Management Protocol (SNMP)	-
IETF RFC 1213	-	Management Information Base for Network Management of TCP/IP-based Internets: MIB-II	-
IETF RFC 1305	-	Network Time Protocol (Version 3) - Specification, Implementation and Analysis	-
IETF RFC 2131	-	Dynamic Host Configuration Protocol	-
IETF RFC 2236	-	Internet Group Management Protocol, Version 2	-
IETF RFC 2544	-	Benchmarking Methodology for Network Interconnect Devices	-
IETF RFC 2988	-	Computing TCP's Retransmission Timer	-
IETF RFC 4836	-	Definitions of Managed Objects for IEEE 802.3 Medium Attachment Units (MAUs)	-



INTERNATIONAL STANDARD



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

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