SLOVENSKI STANDARD
SIST EN IEC 61158-4-2:2023

01-november-2023

Industrijska komunikacijska omrežja - Specifikacije za procesna vodila - 4-2. del: Specifikacija protokola na ravni podatkovne povezave - Elementi tipa 2 (IEC 61158-4-2:2023)

Industrial communication networks - Fieldbus specifications - Part 4-2: Data-link layer protocol specification - Type 2 elements (IEC 61158-4-2:2023)

Industrielle Kommunikationsnetze - Feldbusse – Teil 4-2: Protokollspezifikation des Data Link Layer (Sicherungsschicht) - Typ 2-Elemente (IEC 61158-4-2:2023)

Réseaux de communication industriels - Spécifications des bus de terrain - Partie 4-2: Spécification du protocole de la couche liaison de données - Éléments de type 2 (IEC 61158-4-2:2023)

Ta slovenski standard je istoveten z: EN IEC 61158-4-2:2023

ICS:

25.040.40	Merjenje in krmiljenje industrijskih postopkov	Industrial process measurement and control
35.100.20	Podatkovni povezovalni sloj	Data link layer
35.110	Omreževanje	Networking

SIST EN IEC 61158-4-2:2023 **en,fr,de**

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN IEC 61158-4-2

April 2023

ICS 25.040.40; 35.100.20; 35.110

Supersedes EN IEC 61158-4-2:2019

English Version

Industrial communication networks - Fieldbus specifications - Part 4-2: Data-link layer protocol specification - Type 2 elements (IEC 61158-4-2:2023)

Réseaux de communication industriels - Spécifications des bus de terrain - Partie 4-2: Spécification du protocole de la couche liaison de données - Éléments de type 2 (IEC 61158-4-2:2023)

Industrielle Kommunikationsnetze - Feldbusse – Teil 4-2: Protokollspezifikation des Data Link Layer (Sicherungsschicht) - Typ 2-Elemente (IEC 61158-4-2:2023)

This European Standard was approved by CENELEC on 2023-04-13. 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.

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European Committee for Electrotechnical Standardization
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Europäisches Komitee für Elektrotechnische Normung

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

Ref. No. EN IEC 61158-4-2:2023 E

European foreword

The text of document 65C/1202/FDIS, future edition 5 of IEC 61158-4-2, 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 61158-4-2:2023.

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) 2024-01-13
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2026-04-13

This document supersedes EN IEC 61158-4-2:2019 and all of its amendments and corrigenda (if any).

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Endorsement notice

The text of the International Standard IEC 61158-4-2:2023 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 61131-9 NOTE Approved as EN IEC 61131-9

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

IEC 61158-2 NOTE Approved as EN 61158-2

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

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

[1] To be published. Stage at the time of publication: FprEN IEC 61784-1-X:2023.

[2] To be published. Stage at the time of publication: FprEN IEC 61784-2-X:2023.

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 61131-3	-	Programmable controllers - Part 3: Programming languages	EN 61131-3	-
IEC 61158-3-2	2023	Industrial communication networks - Fieldbus specifications - Part 3-2: Data-link layer service definition - Type 2 elements	EN IEC 61158-3-2	2023
IEC 61158-5-2	2023	Industrial communication networks - Fieldbus specifications - Part 5-2: Application layer service definition - Type 2 elements	EN IEC 61158-5-2	—[3]
IEC 61158-6-2	2023	Industrial communication networks - Fieldbus specifications - Part 6-2: Application layer protocol specification - Type 2 elements	EN IEC 61158-6-2	—[4]
IEC 61588	-	Precision clock synchronization protocol for networked measurement and control systems	-	-
IEC 61784-3-2	-	Industrial communication networks - Profiles - Part 3-2: Functional safety fieldbuses - Additional specifications for CPF 2	EN IEC 61784-3-2	-
IEC 62026-3	2014	Low-voltage switchgear and controlgear - Controller-device interfaces (CDIs) - Part 3: DeviceNet	EN 62026-3	2015
IEC 62439-3	2016	Industrial communication networks - High availability automation networks - Part 3: Parallel Redundancy Protocol (PRP) and High-availability Seamless Redundancy (HSR)	EN IEC 62439-3	2018

[3] Under preparation. Stage at time of publication: prEN IEC 61158-5-2:2023.

[4] Under preparation. Stage at time of publication: prEN IEC 61158-6-2:2023.

ISO/IEC 13239	-	Information technology - Telecommunications and information exchange between systems - High-level data link control (HDLC) procedures	-	-
ISO/IEC 7498-1	-	Information technology - Open Systems Interconnection - Basic reference model: The basic model	-	-
ISO/IEC 7498-3	-	Information technology - Open Systems Interconnection - Basic reference model: Naming and addressing	-	-
ISO/IEC/IEEE 8802-3	-	Telecommunications and exchange between information technology systems - Requirements for local and metropolitan area networks - Part 3: Standard for Ethernet	-	-
ISO 11898-1	2015	Road vehicles - Controller area network (CAN) - Part 1: Data link layer and physical signalling	-	-
IEEE Std 802.1AB	2016	IEEE Standard for Local and metropolitan area networks: Station and Media Access Control Connectivity Discovery	-	-
IEEE Std 802.1ABcu	2021	Standard for Local and metropolitan area networks - Station and Media Access Control Connectivity Discovery Amendment: YANG Data Model	-	-
IEEE Std 802.1Q	2018	IEEE Standard for local and metropolitan area networks - Bridges and bridged networks	-	-
IEEE Std 802.3	2018	IEEE Standard for Ethernet	-	-
IETF RFC 951	1985	Bootstrap Protocol (BOOTP)	-	-
IETF RFC 1213	1991	Management Information Base for Network Management of TCP/IP-based Internets: MIB-II	-	-
IETF RFC 1542	1993	Clarifications and Extensions for the Bootstrap Protocol	-	-
IETF RFC 1643	1994	Definitions of Managed Objects for the Ethernet-like interface types	-	-
IETF RFC 2131	1997	Dynamic Host Configuration Protocol	-	-
IETF RFC 2132	1997	DHCP Options and BOOTP Vendor Extensions	-	-
IETF RFC 2863	2000	The Interfaces Group MIB	-	-
IETF RFC 3418	2002	Management Information Base (MIB) for the Simple Network Management Protocol (SNMP)	-	-
IETF RFC 3635	2003	Definitions of Managed Objects for the Ethernet-like Interface Types	-	-
IETF RFC 4541	2006	Considerations for Internet Group Management Protocol (IGMP) and Multicast Listener Discovery (MLD) Snooping Switches	-	-

IETF RFC 5227	2008	IPv4 Address Conflict Detection	-	-

IEC 61158-4-2

Edition 5.0 2023-03

INTERNATIONAL STANDARD

colour inside

Industrial communication networks – Fieldbus specifications – Part 4-2: Data-link layer protocol specification – Type 2 elements

INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

ICS 25.040.40; 35.100.20; 35.110

ISBN 978-2-8322-6554-3

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