
**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 (Sicherheitsschicht) - 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)

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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:
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(Sicherheitsschicht) - Typ 2-Elemente
(IEC 61158-4-2:2023)

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EN IEC 61158-4-2:2023 (E)**European foreword**

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

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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

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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.cenelec.eu.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
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.

EN IEC 61158-4-2:2023 (E)

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

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