



SLOVENSKI STANDARD

SIST EN IEC 61158-5-10:2023

01-november-2023

Nadomešča:

SIST EN IEC 61158-5-10:2019

**Industrijska komunikacijska omrežja - Specifikacije za procesna vodila - 5-10. del:
Definicija opravil na aplikacijski ravni - Elementi tipa 10 (IEC 61158-5-10:2023)**

Industrial communication networks - Fieldbus specifications - Part 5-10: Application layer service definition - Type 10 elements (IEC 61158-5-10:2023)

Industrielle Kommunikationsnetze - Feldbusse - Teil 5-10: Dienstfestlegungen des Application Layer (Anwendungsschicht) - Typ 10-Elemente (IEC 61158-5-10:2023)

Réseaux de communication industriels - Spécifications des bus de terrain - Partie 5-10: Définition des services de la couche application Eléments de type 10 (IEC 61158-5-10:2023)

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ICS:

25.040.40	Merjenje in krmiljenje industrijskih postopkov	Industrial process measurement and control
35.100.70	Uporabniški sloj	Application layer
35.110	Omreževanje	Networking

SIST EN IEC 61158-5-10:2023

en,fr,de

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN IEC 61158-5-10

May 2023

ICS 25.040.40; 35.100.70; 35.110

Supersedes EN IEC 61158-5-10:2019

English Version

**Industrial communication networks - Fieldbus specifications -
Part 5-10: Application layer service definition - Type 10 elements
(IEC 61158-5-10:2023)**

Réseaux de communication industriels - Spécifications des
bus de terrain - Partie 5-10: Définition des services de la
couche application - Eléments de type 10
(IEC 61158-5-10:2023)

Industrielle Kommunikationsnetze - Feldbusse - Teil 5-10:
Dienstfestlegungen des Application Layer
(Anwendungsschicht) - Typ 10-Elemente
(IEC 61158-5-10:2023)

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European Committee for Electrotechnical Standardization
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CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

EN IEC 61158-5-10:2023 (E)**European foreword**

The text of document 65C/1203/FDIS, future edition 5 of IEC 61158-5-10, 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 61158-5-10:2023.

The following dates are fixed:

- latest date by which the document has to be implemented at national (dop) 2024-01-28 level by publication of an identical national standard or by endorsement
- latest date by which the national standards conflicting with the (dow) 2026-04-28 document have to be withdrawn

This document supersedes EN IEC 61158-5-10:2019 and all of its amendments and corrigenda (if any).

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Endorsement notice

The text of the International Standard IEC 61158-5-10:2023 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/IEEE 60802:—¹ NOTE Approved as EN IEC 60802:—² (not modified)

IEC 60870-5-4 NOTE Approved as EN 60870-5-4

IEC 61131-1 NOTE Approved as EN 61131-1

IEC 61375-2-1 NOTE Approved as EN 61375-2-1

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

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

¹ Under preparation: Stage at the time of publication: IEC/IEEE CD 60802:2022.

² Under preparation: Stage at the time of publication: prEN IEC 60802:2020.

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.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 61131-3	2013	Programmable controllers - Part 3: Programming languages	EN 61131-3	2013
IEC 61158-1	2023	Industrial communication networks - Fieldbus specifications - Part 1: Overview and guidance for the IEC 61158 and IEC 61784 series	EN IEC 61158-1	2023
IEC 61158-2	2023	Industrial communication networks - Fieldbus specifications - Part 2: Physical layer specification and service definition	EN IEC 61158-2	2023
IEC 61158-5-3	2023	Industrial communication networks - Fieldbus specifications - Part 5-23: Application layer service definition - Type 23 elements	-	-
IEC 61158-6-3	2023	Industrial communication networks - Fieldbus specifications - Part 6-23: Application layer protocol specification - Type 23 elements	-	-
IEC 61158-6-10	2023	Industrial communication networks - Fieldbus specifications - Part 6-10: Application layer protocol specification - Type 10 elements	-	-
IEC 61784-3-3	-	Industrial communication networks - Profiles - Part 3-3: Functional safety fieldbuses - Additional specifications for CPF 3	EN IEC 61784-3-3	-
IEC 61800-7-203	2015	Adjustable speed electrical power drive systems - Part 7-203: Generic interface and use of profiles for power drive systems - Profile type 3 specification	EN 61800-7-203	2016
IEC 62439-2	2021	Industrial communication networks - High availability automation networks - Part 2: Media Redundancy Protocol (MRP)	EN IEC 62439-2	2022
ISO/IEC 646	1991	Information technology - ISO 7-bit coded character set for information interchange	-	-

EN IEC 61158-5-10:2023 (E)

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
ISO/IEC 7498-1	-	Information technology - Open Systems Interconnection - Basic reference model: The basic model	-	-
ISO/IEC 8822	-	Information technology - Open Systems Interconnection - Presentation service definition	-	-
ISO/IEC 8824-1	-	Information technology - Abstract Syntax Notation One (ASN.1) - Part 1: Specification of basic notation	-	-
ISO/IEC 9545	-	Information technology - Open Systems Interconnection - Application layer structure	-	-
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 10646	-	Information technology - Universal coded character set (UCS)	-	-
ISO/IEC 10731	-	Information technology - Open Systems Interconnection - Basic Reference Model - Conventions for the definition of OSI services	-	-
ISO/IEC/IEEE 60559	2020	Information technology - Microprocessor Systems - Floating-Point arithmetic	-	-
ISO 8601-1	2019	Date and time - Representations for information interchange - Part 1: Basic rules	-	-
IEEE 802.1AB	2016	IEEE Standard for Local and metropolitan area networks - Station and Media Access Control Connectivity Discovery	-	-
IEEE 802.1AS	2020	IEEE Standard for Local and Metropolitan Area Networks - Timing and Synchronization for Time-Sensitive Applications	-	-
IEEE 802.1CB	2017	IEEE Standard for Local and metropolitan area networks - Frame Replication and Elimination for Reliability	-	-
IEEE Std 802.1Q	2018	IEEE Standard for Local and metropolitan area networks - Media Access Control (MAC) Bridges and Virtual Bridged Local Area Networks	-	-
IEEE 802.3	2018	IEEE Standard for Ethernet	-	-
IETF RFC 768	1980	User Datagram Protocol	-	-
IETF RFC 791	1981	Internet Protocol Darpa Internet Program Protocol Specification	-	-
IETF RFC 792	1981	Internet Control Message Protocol	-	-
IETF RFC 826	1982	Ethernet Address Resolution Protocol: Or Converting Network Protocol Addresses to 48.bit Ethernet Address for Transmission on Ethernet Hardware	-	-
IETF RFC 894	1984	Standard for the Transmission of IP Datagrams over Ethernet Networks	-	-

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IETF RFC 1034	1987	Domain names - concepts and facilities	-	-
IETF RFC 1112	1989	Host Extensions for IP multicasting	-	-
IETF RFC 1157	1990	Simple Network Management Protocol (SNMP)	-	-
IETF RFC 1213	1991	Management Information Base for Network Management of TCP/IP-based Internets: MIB-II	-	-
IETF RFC 2131	1997	Dynamic Host Configuration Protocol	-	-
IETF RFC 2132	1997	DHCP Options and BOOTP Vendor Extensions	-	-
IETF RFC 2365	1998	Administratively Scoped IP Multicast	-	-
IETF RFC 2674	1999	Definitions of Managed Objects for Bridges with Traffic Classes, Multicast Filtering and Virtual LAN Extensions	-	-
IETF RFC 2737	1999	Entity MIB (Version 2)	-	-
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 3490	2003	Internationalizing Domain Names in Applications (IDNA)	-	-
IETF RFC 3621	2003	Power Ethernet MIB	-	-
IETF RFC 4836	2007	Definitions of Managed Objects for IEEE 802.3 Medium Attachment Units (MAUs)	-	-
IETF RFC 5905	2010	Network Time Protocol Version 4: Protocol and Algorithms Specification	-	-
IETF RFC 6020	2010	A Data Modeling Language for the Network Configuration Protocol (NETCONF)	-	-
IETF RFC 6241	2011	Network Configuration Protocol (NETCONF)	-	-
IETF RFC 6890	2013	Special-Purpose IP Address Registries	-	-
The Open Group - Publication C706	-	Technical Standard DCE1.1: Remote Procedure Call	-	-
Metro Ethernet Forum - MEF 10.4	2018	Subscriber Ethernet Service Attributes	-	-



IEC 61158-5-10

Edition 5.0 2023-03

INTERNATIONAL STANDARD



**Industrial communication networks – Fieldbus specifications –
Part 5-10: Application layer service definition – Type 10 elements**

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Document Preview

[SIST EN IEC 61158-5-10:2023](https://standards.iteh.ai/catalog/standards/sist/adfl92b3-3358-44ad-a07b-750e869612a0/sist-en-iec-61158-5-10-2023)

<https://standards.iteh.ai/catalog/standards/sist/adfl92b3-3358-44ad-a07b-750e869612a0/sist-en-iec-61158-5-10-2023>

INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

ICS 25.040.40; 35.100.70; 35.110

ISBN 978-2-8322-6578-9

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