

# SLOVENSKI STANDARD

## SIST EN IEC 61158-6-12:2019

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Nadomešča:

SIST EN 61158-6-12:2015

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**Industrijska komunikacijska omrežja - Specifikacije za procesna vodila - 6-12. del: Specifikacija protokola na aplikacijski ravni - Elementi tipa 12 (IEC 61158-6-12:2019)**

Industrial communication networks - Fieldbus specifications - Part 6-12: Application layer protocol specification - Type 12 elements (IEC 61158-6-12:2019)

Industrielle Kommunikationsnetze - Feldbusse - Teil 6-12: Protokollspezifikation des Application Layer (Anwendungsschicht) - Typ 12-Elemente (IEC 61158-6-12:2019)

Réseaux de communication industriels - Specifications des bus de terrain - Partie 6-12: Spécification du protocole de la couche application - Éléments de type 12 (IEC 61158-6-12:2019)

**Ta slovenski standard je istoveten z: EN IEC 61158-6-12:2019**

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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 61158-6-12:2019**

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EUROPEAN STANDARD

EN IEC 61158-6-12

NORME EUROPÉENNE

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August 2019

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Supersedes EN 61158-6-12:2014 and all of its  
amendments and corrigenda (if any)

English Version

Industrial communication networks - Fieldbus specifications -  
Part 6-12: Application layer protocol specification - Type 12  
elements  
(IEC 61158-6-12:2019)

Réseaux de communication industriels - Spécifications des  
bus de terrain - Partie 6-12: Spécification du protocole de la  
couche application - Eléments de type 12  
(IEC 61158-6-12:2019)

Industrielle Kommunikationsnetze - Feldbusse - Teil 6-12:  
Protokollspezifikation des Application Layer  
(Anwendungsschicht) - Typ 12-Elemente  
(IEC 61158-6-12:2019)

This European Standard was approved by CENELEC on 2019-07-25. 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.

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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

**EN IEC 61158-6-12:2019 (E)****European foreword**

The text of document 65C/948/FDIS, future edition 4 of IEC 61158-6-12, 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 61158-6-12:2019.

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) 2020-04-25
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2022-07-25

This document supersedes EN 61158-6-12:2014 and all of its amendments and corrigenda (if any).

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The text of the International Standard IEC 61158-6-12:2019 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 standards indicated:

IEC 61131-3	NOTE Harmonized as EN 61131-3
IEC 61158-1:2019	NOTE Harmonized as EN IEC 61158-1:2019 (not modified)
IEC 61158-4-12	NOTE Harmonized as EN IEC 61158-4-12
IEC 61784-1	NOTE Harmonized as EN IEC 61784-1
IEC 61784-2	NOTE Harmonized as EN IEC 61784-2

## 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](http://www.cenelec.eu).

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 61158-3-12	-	Industrial communication networks - Fieldbus specifications - Part 3-12: Data- link layer service definition - Type 12 elements	-EN IEC 61158-3-12 -	-
IEC 61158-5-12	-	Industrial communication networks - Fieldbus specifications - Part 5-12: Application layer service definition - Type 12 elements	-EN IEC 61158-5-12 -	-
IEC 61158-6	series	Industrial communication networks -- Fieldbus specifications - Part 6: Application layer protocol specification	--	-
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 9545	-	Information technology - Open Systems- Interconnection - Application layer structure	-	-
ISO/IEC 9899	-	Information technology - Programming- languages - C	-	-
ISO/IEC 10731	-	Information technology - Open Systems- Interconnection - Basic Reference Model - Conventions for the definition of OSI services	-	-
IEEE Std 802.1D	-	IEEE standard for Local and metropolitan area networks - Common specifications - Media access control (MAC) Bridges	-	-
IEEE Std 802.1Q	-	IEEE standard for Local and metropolitan area networks - Bridges and Bridged Networks	-	-
IETF RFC 768	-	User Datagram Protocol	-	-
IETF RFC 791	-	Internet protocol darpa internet program- protocol specification	-	-

**EN IEC 61158-6-12:2019 (E)**

IETF RFC 826	-	Ethernet Address Resolution Protocol: Or- Converting Network Protocol Addresses to 48.bit Ethernet Address for Transmission on Ethernet Hardware	-
ISO/IEC/IEEE 60559	-	Information technology - Microprocessor- Systems - Floating-Point arithmetic	-
ISO/IEC/IEEE 8802-- 3	-	Standard for Ethernet	-

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# INTERNATIONAL STANDARD

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**Industrial communication networks – Fieldbus specifications –  
Part 6-12: Application layer protocol specification – Type 12 elements**

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

**INDUSTRIAL COMMUNICATION NETWORKS –  
FIELD BUS SPECIFICATIONS –****Part 6-12: Application layer protocol specification –  
Type 12 elements**

## FOREWORD

- 1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as "IEC Publication(s)"). Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
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NOTE Combinations of protocol types are specified in IEC 61784-1 and IEC 61784-2.

International Standard IEC 61158-6-12 has been prepared by subcommittee 65C: Industrial networks, of IEC technical committee 65: Industrial-process measurement, control and automation.

This fourth edition cancels and replaces the third edition published in 2014. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

- technical corrections; and
- editorial improvements for clarification.

The text of this International Standard is based on the following documents:

FDIS	Report on voting
65C/948/FDIS	65C/956/RVD

Full information on the voting for the approval of this International Standard can be found in the report on voting indicated in the above table.

This publication has been drafted in accordance with ISO/IEC Directives, Part 2.

A list of all parts of the IEC 61158 series, published under the general title *Industrial communication networks – Fieldbus specifications*, can be found on the IEC web site.

The committee has decided that the contents of this publication will remain unchanged until the stability date indicated on the IEC web site under "http://webstore.iec.ch" in the data related to the specific publication. At this date, the publication will be

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
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