



SLOVENSKI STANDARD

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01-december-2004

Nadomešča:

SIST EN 50170:2001

SIST EN 50170:2001/A1:2003

SIST EN 50170:2001/A2:2001

SIST EN 50254:2001

Digital data communication for measurement and control - Fieldbus for use in industrial control systems - Part 4: Data link protocol specification

Digital data communication for measurement and control - Fieldbus for use in industrial control systems -- Part 4: Data link protocol specification

Digitale Datenkommunikation in der Leittechnik - Fieldbus für industrielle Leitsysteme -- Teil 4: Spezifikation des Protokolls der Sicherungsschicht (Data Link Layer)

Communications numériques pour les systèmes de mesure et de commande - Bus de terrain utilisés dans les systèmes de commande industriels -- Partie 4: Spécification du protocole de la couche de liaison de données

Ta slovenski standard je istoveten z: EN 61158-4:2004

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

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EUROPEAN STANDARD

EN 61158-4

NORME EUROPÉENNE

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July 2004

ICS 25.040; 35.100; 35.240.50

Partially supersedes EN 50170:1996 + A1:2002 + A2:1999 + A3:2002 and EN 50254:1998

English version

**Digital data communication for measurement and control -
Fieldbus for use in industrial control systems
Part 4: Data link protocol specification
(IEC 61158-4:2003 + corrigendum 2004)**

Communications numériques pour les
systèmes de mesure et de commande -
Bus de terrain utilisés dans les systèmes
de commande industriels
Partie 4: Spécification du protocole
de la couche de liaison de données
(CEI 61158-4:2003 + corrigendum 2004)

Digitale Datenkommunikation
in der Leittechnik -
Feldbus für industrielle Leitsysteme
Teil 4: Spezifikation des Protokolls
der Sicherungsschicht (Data Link Layer)
(IEC 61158-4:2003 + Corrigendum 2004)

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This European Standard was approved by CENELEC on 2004-03-16. 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 Central Secretariat or to any CENELEC member.

This European Standard exists in one official version (English). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the Central Secretariat has the same status as the official versions.

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CENELEC

European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

Central Secretariat: rue de Stassart 35, B - 1050 Brussels

Foreword

The text of the International Standard IEC 61158-4:2003, prepared by SC 65C, Digital communications, of IEC TC 65, Industrial-process measurement and control, was submitted to the Unique Acceptance Procedure and was approved by CENELEC as EN 61158-4 on 2004-03-16 with inclusion of the accepted future IEC corrigendum.

This European Standard, together with EN 61158-2:2004, EN 61158-3:2004, EN 61158-5:2004, EN 61158-6:2004 and EN 61784-1:2004, supersedes EN 50170:1996 + A1:2002 (+ corr. Aug. 2002) + A2:1999 + A3:2002 (+ corr. Aug. 2002) and EN 50254:1998.

The following dates were fixed:

- latest date by which the EN has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2005-04-01
- latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 2007-04-01

The International Electrotechnical Commission (IEC) and CENELEC draw attention to the fact that it is claimed that compliance with this document may involve the use of patents as follows, where the [xx] notation indicates the holder of the patent right:

Type 1 time synchronization and possibly other types:

JP Hei4-35096 [YC] Communication control method

Type 2 and possibly other types:

US 5,400,331 [AB] Communication network interface with screeners for incoming messages

US, 5,471,461 [AB] Digital communication network with a moderator station election process

US 5,491,531 [AB] Media access controller with a shared class message delivery capability

US 5,493,571 [AB] Apparatus and method for digital communications with improved delimiter detection

US 5,537,549 [AB] Communication network with time coordinated station activity by time slot and periodic interval number

US 5,553,095 [AB] Method and apparatus for exchanging different classes of data during different time intervals

Type 3 and possibly other types:

DE 36 43 979 C2 [SI] Deterministisches Zugriffsverfahren nach dem Tokenprinzip für eine Datenübertragung

DE 36 43 979 A1 [SI] Deterministisches Zugriffsverfahren nach dem Tokenprinzip für eine Datenübertragung

Type 8 and possibly other types:

DE 41 00 629 C1 [PxC] Steuer- und Datenübertragungsanlage

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[AB]: Rockwell Technologies, LLC
Allen-Bradley Co, LLC
1201 So. Second Street
Milwaukee, WI 53204
USA
Attention: Intellectual Property Dept.

[PxC]: Phoenix Contact GmbH & Co. KG
Referat Patente / Patent Department
Postfach 1341
D-32819 Blomberg
Germany

[SI]: Siemens AG
Ludwig Winkel
Siemensallee 84
D-76181 Karlsruhe
Germany

[YC]: Jun-ichi Tsuboi, Mr.
Yamatate Corporation
Shibuyaku Shibuya, 2-12-19
Tohtate International Building
150-8316 Tokyo
Japan

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

IEC 60559	NOTE	Harmonized as HD 592 S1:1991 (not modified).
IEC 60870-5-1	NOTE	Harmonized as EN 60870-5-1:1993 (not modified).
IEC 61131-2	NOTE	Harmonized as EN 61131-2:1994 (not modified).
ISO/IEC 9314-2	NOTE	Harmonized as EN 29314-2:1993 (not modified).
ISO/IEC 9646-1	NOTE	Harmonized as EN ISO/IEC 9646-1:1996 (not modified).
ISO/IEC 9646-2	NOTE	Harmonized as EN ISO/IEC 9646-2:1996 (not modified).

Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 61158-4:2003 and its corrigendum July 2004 was approved by CENELEC as a European Standard without any modification.

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Annex ZA (normative)

Normative references to international publications with their corresponding European publications

The following referenced documents are indispensable for the application 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 Where an international publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 61131-3	1993	Programmable controllers Part 3: Programming languages	EN 61131-3	1993 ¹⁾
IEC 61158-2 + corr. July	2003 2004	Digital data communication for measurement and control - Fieldbus for use in industrial control systems Part 2: Physical layer specification	EN 61158-2	2004
IEC 61158-3	2003	Part 3: Data Link Layer service definition	EN 61158-3	2004
IEC 61158-5 + corr. July	2003 2004	Part 5: Application Layer service definition	EN 61158-5	2004
IEC 61158-6 + corr. July	2003 2004	Part 6: Application Layer protocol specification	EN 61158-6	2004
ISO/IEC 7498	Series	Information technology - Open systems interconnection - Basic reference model	-	-
ISO/IEC 7498-1	1994	Part 1: The basic model	EN ISO/IEC 7498-1	1995
ISO/IEC 7498-3	1997	Part 3: Naming and addressing	-	-
ISO/IEC 8886	1996	Information technology - Open systems interconnection - Data link service definition	-	-
ISO/IEC 10038	1993	Information technology - Telecommunications and information exchange between systems - Local area networks - Media Access Control (MAC) bridges	-	-
ISO/IEC 10731	1994	Information technology - Open systems interconnection Basic reference model - Conventions for the definition of OSI services	-	-
-	-	General purpose field communication system	EN 50170	1996

¹⁾ EN 61131-3:1993 is superseded by EN 61131-3:2003, which is based on IEC 61131-3:2003.

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INTERNATIONAL STANDARD

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International Electrotechnical Commission, 3, rue de Varembé, PO Box 131, CH-1211 Geneva 20, Switzerland
Telephone: +41 22 919 02 11 Telefax: +41 22 919 03 00 E-mail: inmail@iec.ch Web: www.iec.ch



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