National Standards Authority of Ireland

STANDARD

I.S. EN 61158-6:2004

ICS 25.040
35.100
35.240.50

DIGITAL DATA COMMUNICATION FOR MEASUREMENT AND CONTROL - FIELDBUS FOR USE IN INDUSTRIAL CONTROL SYSTEMS PART 6: APPLICATION LAYER PROTOCOL SPECIFICATION (IEC 61158-6:2003 & CORRIGENDUM 2004)

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EUROPEAN STANDARD **EN 61158-6**

NORME EUROPÉENNE

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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 6: Application layer protocol specification

(IEC 61158-6:2003 + corrigendum 2004)

Communications numériques pour les systèmes de mesure et de commande - Bus de terrain utilisés dans les systèmes de commande industriels Partie 6: Spécification du protocole de la couche d'application (CEI 61158-6:2003 + corrigendum 2004)

Digitale Datenkommunikation in der Leittechnik - Feldbus für industrielle Leitsysteme Teil 6: Spezifikation des Protokolls der Anwendungsschicht (Application Layer) (IEC 61158-6:2003 + Corrigendum 2004)

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.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

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

Ref. No. EN 61158-6:2004 E

Foreword

The text of the International Standard IEC 61158-6:2003, 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 61158-6 on 2004-03-16 with inclusion of the accepted future IEC corrigendum.

This European Standard, together with EN 61158-2:2004 to EN 61158-5:2004 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 8 and possibly other types:

DE 197 39 297 A1 [PxC] Automatisierungssystem und Steuervorrichtung zur transparenten Kommunikation zwischen verschiedenen Netzwerken

US Application number 09/145,848 Filling Date 09/02/98
[PxC] Automation System and connecting Apparatus for the Transparent Communication between two Networks

The IEC and CENELEC take no position concerning the evidence, validity and scope of these patent rights.

The holders of these patent rights have assured the IEC that they are willing to negotiate licences under reasonable and non-discriminatory terms and conditions with applicants throughout the world. In this respect, the statements of the holders of these patent rights are registered with the IEC. Information may be obtained from:

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

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights other than those identified above. IEC and CENELEC shall not be held responsible for identifying any or all such patent rights.

Annex ZA has been added by CENELEC.

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Endorsement notice

The text of the International Standard IEC 61158-6:2003 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.

Publication	Year	Title	EN/HD	Year
IEC 60559	1989	Binary floating-point arithmetic for microprocessor systems	HD 592 S1	1991
IEC 61131-3	1993	Programmable controllers Part 3: Programming languages	EN 61131-3	1993 [1)]
IEC 61158-3	2003	Digital data communication for measurement and control - Fieldbus for use in industrial control systems Part 3: Data Link Layer service definition	EN 61158-3	2004
IEC 61158-4 + corr. July	2003 2004	Part 4: Data Link Layer protocol specification	EN 61158-4	2004
IEC 61158-5 + corr. July	2003 2004	Part 5: Application Layer service definition	EN 61158-5	2004
ISO/IEC 7498	Series	Information technology - Open Systems Interconnection - Basic reference model	-	-
ISO/IEC 8822	1994	Information technology - Open Systems Interconnection - Presentation service definition	-	-
ISO/IEC 8824	1990	Information technology - Open Systems Interconnection - Specification of Abstract Syntax Notation One (ASN.1)	-	-
ISO/IEC 8825	1990	Information technology - Open Systems Interconnection - Specification of Basic Encoding Rules for Abstract Syntax Notation One (ASN.1)	-	-
ISO/IEC 9506-2	1990	Industrial automation systems - Manufacturing message specification Part 2: Protocol specification	EN ISO/IEC 9506-2	1993

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