National Standards Authority of Ireland

IRISH STANDARD

I.S. EN 61108-1:2003

ICS 47.020.70

MARITIME NAVIGATION AND RADIOCOMMUNICATION EQUIPMENT AND SYSTEMS - GLOBAL NAVIGATION SATELLITE SYSTEMS (GNSS)

PART 1: GLOBAL POSITIONING SYSTEM (GPS) - RECEIVER EQUIPMENT - PERFORMANCE STANDARDS, METHODS OF TESTING AND REQUIRED TEST RESULTS (IEC 61108-1:2003)

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EUROPEAN STANDARD **EN 61108-1**

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English version

Maritime navigation and radiocommunication equipment and systems – Global navigation satellite systems (GNSS) Part 1: Global positioning system (GPS) – Receiver equipment – Performance standards, methods of testing and required test results

(IEC 61108-1:2003)

Matériels et systèmes de navigation et de radiocommunication maritimes – Système mondial de navigation par satellite (GNSS) Partie 1: Système de positionnement par satellite GPS – Matériel de réception – Normes de fonctionnement, méthodes d'essai et résultats d'essai exigibles (CEI 61108-1:2003)

Navigations- und Funkkommunikationsgeräte und -systeme für die Seeschifffahrt – Weltweite Navigations-Satellitensysteme (GNSS) Teil 1: Weltweites Ortungssystem (GPS) – Empfangsanlagen – Funktionsanforderungen, Prüfverfahren und geforderte Prüfergebnisse (IEC 61108-1:2003)

This European Standard was approved by CENELEC on 2003-10-01. 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 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 Central Secretariat has the same status as the official versions.

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

CENELEC

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

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Foreword

The text of document 80/371/FDIS, future edition 2 of IEC 61108-1, prepared by IEC TC 80, Maritime navigation and radiocommunication equipment and systems, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 61108-1 on 2003-10-01.

This European Standard supersedes EN 61108-1:1996.

It includes the following technical changes:

a) it reflects the changes brought about by IMP adopting GPS as part of the carriage requirement on ships defined in SOLAS Chapter V;

b) the new IMO performance standards, resolution MSC.112(73), replaced the previous issue, A.819(19), for new installations on the 1st of July 2002. This second edition of N 61108-1 incorporates revised tests for type approvals to the new performance standard;

c) changes include the need for a data output to the EN 61162 series giving COG SOG and UTC with validity marking, operation during interference conditions and improved failure warnings.

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) 2004-07-01

– latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 2006-10-01

Annexes designated "normative" are part of the body of the standard.
In this standard, annex ZA is normative.
Annex ZA has been added by CENELEC.

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Endorsement notice

The text of the International Standard IEC 61108-1:2003 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

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

NOTE When an international publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

Publication	Year	Title	EN/HD	Year
IEC 60721-3-6	1987	Classification of environmental conditions Part 3: Classification of groups of environmental parameters and their severities Section 6: Ship environment	EN 60721-3-6 [1)]	1993
IEC 60945	- [2)]	Maritime navigation and radiocommunication equipment and systems - General requirements - Methods of testing and required test results	EN 60945	2002 [3)]
IEC 61162	Series	Maritime navigation and radiocommunication equipment and systems - Digital interfaces	EN 61162	Series
IMO Resolution A.529(13)	1983	Accuracy standards for navigation	-	-
IMO Resolution A.694(17)	1991	General requirements for shipborne radio equipment forming part of the global maritime distress and safety system (GMDSS) and for electronic navigational aids	-	-
IMO Resolution A.815(19)	1995	Worldwide radionavigation system	-	-
IMO Resolution MSC.112(73)	2000	Performance standards for shipborne global positioning system (GPS) receiver equipment	-	-

[1)] EN 60721-3-6 includes A1:1991 to IEC 60721-3-6.

[2)] Undated reference.

[3)] Valid edition at date of issue.

Publication	Year	Title	EN/HD	Year
IMO Resolution MSC.114(73)	2000	Performance standards for shipborne DGPS and DGLONASS maritime radio beacon receiver equipment	-	-
ITU-R Recommendation M.823-1	1995	Technical characteristics of differential transmissions for global navigation satellite systems (GNSS) from maritime radio beacons in the frequency band 285 kHz - 325 kHz (283,5 kHz - 315 kHz in Region 1)	-	-
ITU-R Recommendation M.823-2	1997	Techhnical characteristics of differential transmissions for Global Navigation Satellite Systems from maritime radio beacons in the frequency band 283.5 - 315 kHz in Region 1 and 285 - 325 kHz in Regions 2 and 3	-	-
ITU-R Recommendation M.1477	2000	Technical and performance characteristics of current and planned radionavigation-satellite service (space-to-Earth) and aeronautical radio-navigation service receivers to be considered in interference studies in the band 1 559 - 1 610 MHz	-	-
-	2001	Global Positioning System – Standard Positioning Service – Performance Specification (USA Department of Defence)		