



NSAI
Standards

Irish Standard
I.S. EN 62561-2:2012

Lightning Protection System Components (LPSC) -- Part 2: Requirements for conductors and earth electrodes (IEC 62561-2:2012 (MOD))

I.S. EN 62561-2:2012

Incorporating amendments/corrigenda issued since publication:

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I.S. xxx: Irish Standard – national specification based on the consensus of an expert panel and subject to public consultation.

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EUROPEAN STANDARD

EN 62561-2

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June 2012

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Supersedes EN 50164-2:2008

English version

**Lightning Protection System Components (LPSC) -
Part 2: Requirements for conductors and earth electrodes
(IEC 62561-2:2012, modified)**

Composants des systèmes de protection
contre la foudre (CSPF) -
Partie 2: Exigences pour les conducteurs
et les électrodes de terre
(CEI 62561-2:2012, modifiée)

Blitzschutzsystembauteile (LPSC) -
Teil 2: Anforderungen an Leiter und Erder
(IEC 62561-2:2012, modifiziert)

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CENELEC

European Committee for Electrotechnical Standardization

Comité Européen de Normalisation Electrotechnique

Europäisches Komitee für Elektrotechnische Normung

Management Centre: Avenue Marnix 17, B - 1000 Brussels

Foreword

The text of document 81/417/FDIS, future edition 1 of IEC 62561-2, prepared by IEC/TC 81, "Lightning protection", was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 62561-2:2012.

A draft amendment, which covers common modifications to IEC 62561-2 (81/417/FDIS), was prepared by CLC/TC 81X "Lightning protection" and approved by CENELEC.

The following dates are fixed:

- latest date by which this document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2013-03-16
- latest date by which the national standards conflicting with this document have to be withdrawn (dow) 2015-03-16

This document supersedes EN 50164-2:2008.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CENELEC [and/or CEN] shall not be held responsible for identifying any or all such patent rights.

Clauses, subclauses, notes, tables, figures and annexes which are additional to those in IEC 62561-2:2012 are prefixed "Z".

Endorsement notice

The text of the International Standard IEC 62561-2:2012 was approved by CENELEC as a European Standard with agreed common modifications.

COMMON MODIFICATIONS

Whole document

Replace all references to IEC 62305 by references to EN 62305.

Replace all references to IEC 62561 by references to EN 62561.

4 Requirements

Under 4.3, Table 1, footnote ^g, **replace** "IEC 60228" by "EN 60228".

Under 4.5, Table 3, footnote ⁱ, **replace** "IEC 60228" by "EN 60228".

5 Tests

Under 5.2.5.1, 1st line, **replace** "ISO 6892-1" by "EN ISO 6892-1".

Under 5.2.5.1, 3rd line, **replace** "as per D.1 of ISO 6892-1:2009" by "as per D.1 of EN ISO 6892-1:2009".

Annexes

Annex A (normative) Environmental test for conductors, air termination rods and earth lead-in rods

In A.1, **replace** twice "IEC 60068-2-52:1996" by "EN 60068-2-52:1996".

Add the following new annexes:

Annex ZA (normative)

Normative references to international publications with their corresponding European publications

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. 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 60068-2-52 + corr. July	1996 1996	Environmental testing – Part 2: Tests – Test Kb: Salt mist, cyclic (sodium chloride solution)	EN 60068-2-52	1996
IEC 62305-3	-	Protection against lightning – Part 3: Physical damage to structures and life hazard	EN 62305-3	-
IEC 62305-4	-	Protection against lightning – Part 4: Electrical and electronic systems within structures	EN 62305-4	-
IEC 62561-1	-	Lightning Protection System Components (LPSC) – Part 1: Requirements for connection components	EN 62561-1	-
ISO 1460	-	Metallic coatings – Hot dip galvanized coatings on ferrous metals – Gravimetric determination of the mass per unit area	EN ISO 1460	-
ISO 1461	-	Hot dip galvanized coatings on fabricated iron and steel articles – Specifications and test methods	EN ISO 1461	-
ISO 2178	-	Non-magnetic coatings on magnetic substrates – Measurement of coating thickness – Magnetic method	EN ISO 2178	-
ISO 6892-1	2009	Metallic materials – Tensile testing – Part 1: Method of test at room temperature	EN ISO 6892-1	2009
ISO 6957	1988	Copper alloys – Ammonia test for stress corrosion resistance	-	-
ISO 6988	1985	Metallic and other non-organic coatings – Sulfur dioxide test with general condensation of moisture	EN ISO 6988	1994

Annex ZB (informative)

Identification and differences of tests between EN 62561-2:2012 and EN 50164-2:2008

**Table ZB.1 – Identification and differences of tests
between EN 62561-2:2012 and EN 50164-2:2008**

Test description	EN 62561-2:2012 Clause:	Reference: Annex Table/Figure	EN 50164-2:2008 Clause:	Reference: Annex Table/Figure	Remarks/Deviations
General conditions for tests	5.1		5.1		None
Tests for thickness coating on conductors	5.2.1	Table 1 Table 3	5.2.1	Table 1	None
Bend and adhesion test for coated conductors	5.2.2		5.2.2		None
Environmental test	5.2.3	A.1 A.2	5.2.3	Annex A	Same tests. Listed as A.1 and A.2 in EN 62561-2:2012
Tensile and elongation test	5.2.4	Table 2 Table 4	5.2.4	Table 2	None
Electrical resistivity test	5.2.5	Annex D Table 2 Table 4	5.2.5	Annex D Table 2 Table 4	None
Tests for thickness coating on earth rods	5.3.1	Table 3	5.3.1	Table 3	None
Adhesion test	5.3.2	Figure 2	5.3.2	Figure 3	None
Bend test	5.3.3		5.3.3		None
Environmental test	5.3.4	A.1 A.2	5.3.4	Annex A	Same tests. Listed as A.1 and A.2 in EN 62561-2:2012
Tensile strength test	5.3.5	Table 4	5.3.5	Table 4	None
Electrical resistivity test	5.3.7	Annex D Table 4	5.3.6	Annex D Table 4	None
Yield/tensile ratio test	5.3.6	Table 4	5.3.7	Table 4	None
Compression test for joints for earth rods	5.4.1	Figure 4	5.4.1	Figure 2	None
Environmental electrical tests	5.4.2	A.1 A.2 A.3	5.4.2	Annex A	Same test. Listed as A.1, A.2 and A.3 in EN 62561-2:2012
Marking test	5.5				Addition to EN 62561-2:2012

Bibliography

Add the following reference:

EN 50164-2:2008, *Lightning Protection Components (LPC) – Part 2: Requirements for conductors and earth electrodes*

Replace the 2nd and 4th references by the following:

EN 60228, *Conductors of insulated cables (IEC 60228)*

EN 62305-1, *Protection against lightning – Part 1: General principles (IEC 62305-1)*

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

LIGHTNING PROTECTION SYSTEM COMPONENTS (LPSC) –**Part 2: Requirements for conductors and earth electrodes****FOREWORD**

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International Standard IEC 62561-2 has been prepared by IEC technical committee 81: Lightning protection.

The text of this standard is based on the following documents:

FDIS	Report on voting
81/417/FDIS	81/423/RVD

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

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

The content of this document is taken from the European Standard EN 50164-2.

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A list of all the parts in the IEC 62561 series, published under the general title *Lightning protection system components (LPSC)*, can be found on the IEC website.

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
- amended.

A bilingual version of this publication may be issued at a later date.

INTRODUCTION

This part of IEC 62561 deals with the requirements and tests for lightning protection system components (LPSC) used for the installation of a lightning protection system (LPS) designed and implemented according to the IEC 62305 series of standards.

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