



NSAI
Standards

Irish Standard
I.S. EN 62561-6:2011

Lightning protection system components (LPSC) -- Part 6: Requirements for lightning strike counters (LSC) (IEC 62561-6:2011 (MOD))

I.S. EN 62561-6:2011

Incorporating amendments/corrigenda issued since publication:

The National Standards Authority of Ireland (NSAI) produces the following categories of formal documents:

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

S.R. xxx: Standard Recommendation - recommendation based on the consensus of an expert panel and subject to public consultation.

SWiFT xxx: A rapidly developed recommendatory document based on the consensus of the participants of an NSAI workshop.

<i>This document replaces:</i> EN 50164-6:2009	<i>This document is based on:</i> EN 62561-6:2011 EN 50164-6:2009	<i>Published:</i> 16 September, 2011 15 January, 2009
This document was published under the authority of the NSAI and comes into effect on: 26 September, 2011		ICS number: 29.020 91.120.40
NSAI 1 Swift Square, Northwood, Santry Dublin 9	T +353 1 807 3800 F +353 1 807 3838 E standards@nsai.ie W NSAI.ie	Sales: T +353 1 857 6730 F +353 1 857 6729 W standards.ie
Údarás um Chaighdeáin Náisiúnta na hÉireann		

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 62561-6

September 2011

ICS 29.020; 91.120.40

Supersedes EN 50164-6:2009

English version

**Lightning protection system components (LPSC) -
Part 6: Requirements for lightning strike counters (LSC)**
(IEC 62561-6:2011, modified)

Composants de système de protection
contre la foudre (CSPF) -
Partie 6: Exigences pour les compteurs de
coups de foudre (LSC)
(CEI 62561-6:2011, modifiée)

Blitzschutzsystembauteile (LPSC) -
Teil 6: Anforderungen an Blitzzähler (LSC)
(IEC 62561-6:2011, modifiziert)

This European Standard was approved by CENELEC on 2011-07-28. 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, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

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 81/392/FDIS, future edition 1 of IEC 62561-6, prepared by IEC TC 81, Lightning protection, was submitted to the IEC-CENELEC parallel vote.

A draft amendment, prepared by the Technical Committee CENELEC TC 81X, Lightning protection, was submitted to the formal vote.

The combined texts were approved by CENELEC as EN 62561-6:2011 on 2011-07-28.

This European Standard supersedes EN 50164-6:2009.

The following dates were fixed:

- latest date by which the amendment has to be implemented
at national level by publication of an identical
national standard or by endorsement (dop) 2012-07-28
- latest date by which the national standards conflicting
with the amendment have to be withdrawn (dow) 2014-07-28

Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 62561-6:2011 was approved by CENELEC as a European Standard with agreed common modifications as given below.

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

IEC 60068-2-52:1996	NOTE Harmonized as EN 60068-2-52:1996 (not modified).
IEC 61000-6-2	NOTE Harmonized as EN 61000-6-2.

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.

2 Normative references

Replace this subclause by:

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.

IEC 60068-2-52:1996, *Environmental testing - Part 2: Tests - Test Kb: Salt mist, cyclic (sodium chloride solution)* (IEC 60068-2-52:1996 + corr. July 1996)

EN 60068-2-75:1997, *Environmental testing - Part 2-75: Tests - Test Eh: Hammer tests* (IEC 60068-2-75:1997)

EN 60529, *Degrees of protection provided by enclosures (IP Code)* (IEC 60529)

EN 61000-6-4, *Electromagnetic compatibility (EMC) - Part 6-4: Generic standards - Emission standard for industrial environments* (IEC 61000-6-4)

EN 61180-1, *High-voltage test techniques for low-voltage equipment - Part 1: Definitions, test and procedure requirements* (IEC 61180-1)

EN 62305 (series), *Protection against lightning* (IEC 62305 series)

EN ISO 4892-2:2006, *Plastics - Methods of exposure to laboratory light sources - Part 2: Xenon-arc lamps* (ISO 4892-2:2006)

EN ISO 4892-3:2006, *Plastics - Methods of exposure to laboratory light sources - Part 3: Fluorescent UV lamps* (ISO 4892-3:2006)

EN ISO 6988:1994, *Metallic and other non-organic coatings - Sulfur dioxide test with general condensation of moisture* (ISO 6988:1985)

ISO 4892-4:2004, *Plastics - Methods of exposure to laboratory light sources - Part 4: Open-flame carbon-arc lamps*

ISO 6957:1988, *Copper alloys - Ammonia test for stress corrosion resistance*

3 Terms and definitions

In 3.5, **replace** the reference to IEC 60529 by EN 60529.

4.4 Design

In the third paragraph, **replace** the reference to IEC 60529 by EN 60529.

5 Classification

In Table 1, footnote ^b, **replace** the reference to IEC 60060-1 by EN 60060-1.

6 Tests

In 6.4, fifth paragraph, **replace** all the references to IEC 60068-2-75:1997 by EN 60068-2-75:1997.

In 6.5, **replace** the two references to IEC 60529 by EN 60529.

In 6.6.1, **replace** the reference to IEC 61180-1 by EN 61180-1.

7 Electromagnetic compatibility (EMC)

In 7.1, **replace** the reference to IEC 61000-6-4 by EN 61000-6-4.

In 7.2, **replace** the reference to IEC 61000-6-4 by EN 61000-6-4.

8 Structure and content of the test report

8.1 General

In the first sentence, **replace** "for laboratory test reports" by "for type test reports issued by the laboratory".

Annex A (normative) Resistance to ultraviolet light

In A.2, **replace** the reference to ISO 4892-2:2006 by EN ISO 4892-2:2006.

In A.4, **replace** the reference to ISO 4892-3:2006 by EN ISO 4892-3:2006.

Annex B (normative) Conditioning/ageing for lightning strike counters

In Clause B.1, **replace** twice “IEC 60068-2-52:1996” by “EN 60068-2-52:1996”.

In Clause B.2, **replace** twice “ISO 6988:1985” by “EN ISO 6988:1994”.

Bibliography

In the second paragraph, **replace** the reference IEC 60068-2-52:1996 by EN 60068-2-52:1996.

In the third paragraph, **replace** the reference IEC 61000-6-2 by EN 61000-6-2.

Add the following:

EN 60060-1, *High-voltage test techniques - Part 1: General definitions and test requirements* (IEC 60060-1)

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 When 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 60060-1	-	High-voltage test techniques - Part 1: General definitions and test requirements	EN 60060-1	-
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 60068-2-75	1997	Environmental testing - Part 2-75: Tests - Test Eh: Hammer tests	EN 60068-2-75	1997
IEC 60529	-	Degrees of protection provided by enclosures (IP Code)	EN 60529	-
IEC 61000-6-4	-	Electromagnetic compatibility (EMC) - Part 6-4: Generic standards - Emission standard for industrial environments	EN 61000-6-4	-
IEC 61180-1	-	High-voltage test techniques for low-voltage equipment - Part 1: Definitions, test and procedure requirements	EN 61180-1	-
IEC 62305	Series	Protection against lightning - Part 1: General principles	EN 62305	Series
ISO 4892-2	2006	Plastics - Methods of exposure to laboratory light sources - Part 2: Xenon-arc lamps	EN ISO 4892-2	2006
ISO 4892-3	2006	Plastics - Methods of exposure to laboratory light sources - Part 3: Fluorescent UV lamps	EN ISO 4892-3	2006
ISO 4892-4	2004	Plastics - Methods of exposure to laboratory light sources - Part 4: Open-flame carbon-arc lamps		-
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

This page is intentionally left BLANK.

CONTENTS

FOREWORD.....	3
INTRODUCTION.....	5
1 Scope.....	6
2 Normative references.....	6
3 Terms and definitions	7
4 Requirements	7
4.1 General	7
4.2 Documentation	7
4.3 Marking	8
4.4 Design.....	8
5 Classification	8
6 Tests	9
6.1 General test conditions	9
6.2 Resistance to UV radiation tests	10
6.3 Resistance tests to corrosion (for metallic parts).....	10
6.4 Mechanical tests.....	10
6.5 Index of protection confirmation (IP Code)	12
6.6 Electrical tests.....	12
6.6.1 General conditions for test	12
6.6.2 Minimum threshold current (I_{tc}).....	12
6.6.3 Checking of non detection with $I_{tc}/2$	12
6.6.4 Withstand and counting at I_{mcw} current.....	12
6.6.5 Multi pulse test	12
6.7 Marking test.....	12
7 Electromagnetic compatibility (EMC).....	13
7.1 Electromagnetic immunity	13
7.2 Electromagnetic emission	13
8 Structure and content of the test report	13
8.1 General	13
8.2 Report identification.....	13
8.3 Specimen description	14
8.4 Standards and references	14
8.5 Test procedure	14
8.6 Testing equipment description	14
8.7 Measuring instruments description.....	14
8.8 Results and parameters recorded	14
8.9 Statement of pass/fail.....	15
Annex A (normative) Resistance to ultraviolet light	16
Annex B (normative) Conditioning/ageing for lightning strike counters.....	17
Bibliography	18
Figure 1 – Pendulum hammer test apparatus.....	11
Table 1 – Typical values for I_{tc} and I_{mcw}	9

INTERNATIONAL ELECTROTECHNICAL COMMISSION

LIGHTNING PROTECTION SYSTEM COMPONENTS (LPSC) –**Part 6: Requirements for lightning strike counters (LSC)**

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.
- 2) The formal decisions or agreements of IEC on technical matters express, as nearly as possible, an international consensus of opinion on the relevant subjects since each technical committee has representation from all interested IEC National Committees.
- 3) IEC Publications have the form of recommendations for international use and are accepted by IEC National Committees in that sense. While all reasonable efforts are made to ensure that the technical content of IEC Publications is accurate, IEC cannot be held responsible for the way in which they are used or for any misinterpretation by any end user.
- 4) In order to promote international uniformity, IEC National Committees undertake to apply IEC Publications transparently to the maximum extent possible in their national and regional publications. Any divergence between any IEC Publication and the corresponding national or regional publication shall be clearly indicated in the latter.
- 5) IEC itself does not provide any attestation of conformity. Independent certification bodies provide conformity assessment services and, in some areas, access to IEC marks of conformity. IEC is not responsible for any services carried out by independent certification bodies.
- 6) All users should ensure that they have the latest edition of this publication.
- 7) No liability shall attach to IEC or its directors, employees, servants or agents including individual experts and members of its technical committees and IEC National Committees for any personal injury, property damage or other damage of any nature whatsoever, whether direct or indirect, or for costs (including legal fees) and expenses arising out of the publication, use of, or reliance upon, this IEC Publication or any other IEC Publications.
- 8) Attention is drawn to the Normative references cited in this publication. Use of the referenced publications is indispensable for the correct application of this publication.
- 9) Attention is drawn to the possibility that some of the elements of this IEC Publication may be the subject of patent rights. IEC shall not be held responsible for identifying any or all such patent rights.

International Standard IEC 62561-6 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
81/392/FDIS	81/400/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.

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.

I.S. EN 62561-6:2011

62561-6 © IEC:2011

– 5 –

INTRODUCTION

This Part 6 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.

This is a free preview. Purchase the entire publication at the link below:

[Product Page](#)

-
- Looking for additional Standards? Visit Intertek Inform Infostore
 - Learn about LexConnect, All Jurisdictions, Standards referenced in Australian legislation
-