BS EN IEC 62561-2:2018



BSI Standards Publication

Lightning protection system components (LPSC)

Part 2: Requirements for conductors and earth electrodes (IEC 62561-2:2018)

bsi.

National foreword

This British Standard is the UK implementation of EN IEC 62561-2:2018. It is identical to IEC 62561-2:2018. It supersedes BS EN 62561-2:2012, which will be withdrawn on 1 March 2021.

The UK participation in its preparation was entrusted to Technical Committee GEL/81, Protection against lightning.

A list of organizations represented on this committee can be obtained on request to its secretary.

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Lightning protection system components (LPSC) - Part 2: Requirements for conductors and earth electrodes (IEC 62561-2:2018)

Composants des systèmes de protection contre la foudre (CSPF) - Partie 2: Exigences pour les conducteurs et les électrodes de terre (IEC 62561-2:2018)

Blitzschutzsystembauteile (LPSC) - Teil 2: Anforderungen an Leiter und Erder (IEC 62561-2:2018)

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European foreword

The text of document 81/577/FDIS, future edition 2 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 IEC 62561-2:2018.

The following dates are fixed:

• latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement	(dop)	2018-12-01
• latest date by which the national standards conflicting with the document have to be withdrawn	(dow)	2021-03-01

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Endorsement notice

The text of the International Standard IEC 62561-2:2018 was approved by CENELEC as a European Standard without any modification.

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

IEC 62305-1	NOTE	Harmonized as EN 62305-1.
ISO 1460	NOTE	Harmonized as EN ISO 1460.
ISO 1461	NOTE	Harmonized as EN ISO 1461.

Annex ZA
(normative)

Normative references to international publications with their corresponding European publications

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 1 Where an International Publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

NOTE 2 Up-to-date information on the latest versions of the European Standards listed in this annex is available here: www.cenelec.eu.

Publication	Year	Title	EN/HD	Year
IEC 60068-2-52	1996	Environmental testing - Part 2-52: 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 (mod)	2012	Lightning Protection System Components (LPSC) - Part 1: Requirements for connection components	EN 62561-1	2012
ISO 2178	-	Non-magnetic coatings on magnetic substrates - Measurement of coating thickness - Magnetic method	EN ISO 2178	-
ISO 6892-1	-	Metallic materials - Tensile testing - Part 1: Method of test at room temperature	EN ISO 6892-1	-
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

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INTERNATIONAL STANDARD

NORME INTERNATIONALE

Lightning protection system components (LPSC) – Part 2: Requirements for conductors and earth electrodes

Composants des systèmes de protection contre la foudre (CSPF) – Partie 2: Exigences pour les conducteurs et les électrodes de terre

INTERNATIONAL ELECTROTECHNICAL COMMISSION

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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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 subcommittee 81: Lightning protection.

This second edition cancels and replaces the first edition published in 2012. This edition constitutes a technical revision.

This edition includes the following significant technical change with respect to the previous edition:

a) Tables 2 and 4 have been merged into one Table (Table 2).
b) Figure 2 showing the coating measurement of a plate conductor has been added.

The text of this International Standard is based on the following documents:

FDIS	Report on voting
81/577/FDIS	81/580/RVD

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

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

A list of all 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 document will remain unchanged until the stability date indicated on the IEC website under "http://webstore.iec.ch" in the data related to the specific document. At this date, the document will be

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

INTRODUCTION

This part of IEC 62561 deals with the requirements and tests for lightning protection system components (LPSC), specifically conductors and earth electrodes, used for the installation of a lightning protection system (LPS) designed and implemented according to IEC 62305 (all parts).

LIGHTNING PROTECTION SYSTEM COMPONENTS (LPSC) –

Part 2: Requirements for conductors and earth electrodes

1 Scope

Part 2 of IEC 62561 specifies the requirements and tests for:

– metallic conductors (other than "natural" conductors) that form part of the air-termination and down-conductor systems,

– metallic earth electrodes that form part of the earth-termination system.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 2-52: Tests – Test Kb: Salt mist, cyclic (sodium, chloride solution*)

IEC 62305-3, *Protection against lightning – Part 3: Physical damage to structures and life hazard*

IEC 62305-4, *Protection against lightning – Part 4: Electrical and electronic systems within structures*

IEC 62561-1:2012, *Lightning protection system components (LPSC) – Part 1, Requirements for connection components*

ISO 2178, *Non-magnetic coatings on magnetic substrates – Measurement of coating thickness – Magnetic method*

ISO 6892-1, *Metallic materials – Tensile testing – Part 1: Method of test at room temperature*

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

ISO 6988:1985, *Metallic and other non-organic coatings – Sulphur dioxide test with general condensation of moisture*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at http://www.electropedia.org/
- ISO Online browsing platform: available at http://www.iso.org/obp