

# INTERNATIONAL STANDARD

# NORME INTERNATIONALE

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**Lightning protection system components (LPSC) –  
Part 5: Requirements for earth electrode inspection housings and earth  
electrode seals**

**Composants de système de protection contre la foudre (CSPF) –  
Partie 5: Exigences pour les regards de visite et les joints d'étanchéité  
des électrodes de terre**



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# INTERNATIONAL ELECTROTECHNICAL COMMISSION

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## **LIGHTNING PROTECTION SYSTEM COMPONENTS (LPSC) –**

### **Part 5: Requirements for earth electrode inspection housings and earth electrode seals**

#### FOREWORD

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International Standard IEC 62561-5 has been prepared by IEC technical committee 81: Lightning protection.

This second edition cancels and replaces the first edition, published in 2011. This edition constitutes a technical revision.

This edition includes the following major technical changes with respect to the previous edition.

- Testing requirements have been added for the sealing of earth electrode installed in or through watertight concrete.

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

FDIS	Report on voting
81/565/FDIS	81/568/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- withdrawn,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 earth electrode inspection housings and earth electrode seals, 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 5: Requirements for earth electrode inspection housings and earth electrode seals

#### 1 Scope

This part of IEC 62561 specifies the requirements and tests for earth electrode inspection housings (earth housing) installed in the earth and for earth electrode seals.

Lightning protection system components (LPSC) can also be suitable for use in hazardous atmospheres. There are therefore additional requirements when installing the components under such conditions.

NOTE Different requirements and test procedures are given in EN 124 (all parts) and EN 1253 (all parts).

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

#### 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, which can be consulted at the following addresses:

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

##### 3.1

##### **earth electrode inspection housing**

metallic or non-metallic enclosure that houses the down conductor/earth termination connection for inspection and testing purposes and consists of a housing and a removable lid

##### 3.2

##### **earth electrode seal**

water pressure seal used in conjunction with an earth electrode that passes through or enters the foundation or wall of the building, so preventing ground water from entering the building

##### 3.3

##### **earth electrode**

part or group of parts of the earth termination system which provides direct electrical contact with and disperses the lightning current to the earth

EXAMPLES Earth rods, earth conductors and earth plates.