



ATIS-0600038-2022

Intrusion Protection for Outside Plant (OSP) Enclosures

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Intrusion Protection for Outside Plant (OSP) Enclosures

Alliance for Telecommunications Industry Solutions

Approved January 21, 2022

American National Standards Institute, Inc.

Abstract

This standard establishes criteria and test requirements for equipment enclosures and assemblies used in communications network equipment outside plant environments to provide protection from intrusion of dust, water, impact, and insects.

Foreword

The information contained in this Foreword is not part of this American National Standard (ANS) and has not been processed in accordance with ANSI's requirements for an ANS. As such, this Foreword may contain material that has not been subjected to public review or a consensus process. In addition, it does not contain requirements necessary for conformance to the Standard.

The Alliance for Telecommunications Industry Solutions (ATIS) serves the public through improved understanding between carriers, customers, and manufacturers. The Sustainability in Telecom: Energy and Protection (STEP) Committee – formerly the Network Interface, Power, and Protection Committee (NIPP) – engages industry expertise to develop standards and technical reports for communications equipment and environments in the areas of energy efficiency, environmental impacts, power, and protection. The work products of STEP enable vendors, operators, and their customers to deploy and operate reliable, environmentally sustainable, energy-efficient communications technologies. STEP is committed to proactive engagement with national, regional, and international standards development organizations and forums that share its scope of work.

ANSI guidelines specify two categories of requirements: mandatory and recommendation. The mandatory requirements are designated by the word *shall* and recommendations by the word *should*. Where both a mandatory requirement and a recommendation are specified for the same criterion, the recommendation represents a goal currently identified as having distinct compatibility or performance advantages.

Suggestions for improvement of this document are welcome. They should be sent to the Alliance for Telecommunications Industry Solutions, STEP, 1200 G Street NW, Suite 500, Washington, DC 20005.

At the time of consensus on this document, STEP, which was responsible for its development, had the following leadership:

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- E. Gallo, STEP Vice Chair (Ericsson)
- C. Von Hagel, STEP NPP Chair (Intertek)
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The Network Physical Protection (NPP) Subcommittee was responsible for the development of this document.

Table of Contents

1 SCOPE, PURPOSE, & APPLICATION 1

1.1 SCOPE..... 1

1.2 PURPOSE..... 1

1.3 APPLICATION..... 1

2 NORMATIVE REFERENCES 1

3 DEFINITIONS, ACRONYMS, & ABBREVIATIONS 2

3.1 DEFINITIONS..... 2

3.2 ACRONYMS & ABBREVIATIONS 2

4 DUST AND WATER INGRESS 3

4.1 DUST INGRESS 3

4.1.1 *Dust Ingress Protection Requirements* 3

4.2 WATER INGRESS 5

4.2.1 *Water Ingress Protection Requirements*..... 5

5 IMPACT 6

5.1 IMPACT TEST REQUIREMENTS 6

6 INSECT INTRUSION 6

6.1 INSECT INTRUSION REQUIREMENTS 6

A COMPARISON OF NEMA RATINGS, UL TYPES, AND IP RATINGS 7

Table of Tables

TABLE 4.1: DUST PROTECTION TEST ATMOSPHERIC CONDITIONS 4

TABLE A.1: COMPARISON OF NEMA RATINGS, UL TYPES, AND IP RATINGS 7

American National Standard for Telecommunications on –

Intrusion Protection for Outside Plant (OSP) Enclosures

1 Scope, Purpose, & Application

1.1 Scope

The intrusion protection criteria defined in this standard are considered applicable to communications equipment enclosures installed in an outside plant environment. Examples include pedestals and pole-mounted or pad-mounted remote cabinets.

1.2 Purpose

The purpose of this standard is to provide intrusion protection criteria for communications equipment enclosures used in the outside plant.

1.3 Application

This standard is intended for use to determine the effectiveness of enclosure assemblies in providing protection to communications equipment installed within the enclosure and relevant aspects of the enclosure itself from intrusion of dust, water, impact, and insects in the outside plant environment.

2 Normative References

The following standards contain provisions which, through reference in this text, constitute provisions of this Standard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this Standard are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below.

[Ref 1] IEC 60529, *Degrees of protection provided by enclosures (IP Code)*¹

[Ref 2] GR-487-CORE, *Generic Requirements for Electronic Equipment Cabinets*²

[Ref 3] NEMA 250, *Enclosures for Electrical Equipment (1000 Volts Maximum)*³

[Ref 4] UL 50, *Enclosures for Electrical Equipment, Non-Environmental Considerations*⁴

[Ref 5] UL 50E, *Enclosures for Electrical Equipment, Environmental Considerations*⁴

¹ This document is available from the International Electrotechnical Commission (IEC) < <https://webstore.iec.ch> >

² This document is available from Ericsson < <https://telecom-info.njdepot.ericsson.net> >.

³ This document is available from NEMA < <https://www.nema.org/standards> >.

⁴ This document is available from Underwriters' Laboratories < <https://standardscatalog.ul.com> >.