



ATIS-0600010.04.2017 (R2022)

Operational Vibration Requirements for
Communications Equipment

AMERICAN NATIONAL STANDARD FOR TELECOMMUNICATIONS



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Is an American National Standard developed by the ATIS **Sustainability in Telecom: Energy and Protection (STEP) Committee**.

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ATIS-0600010.04.2017(R2022)

American National Standard on

Operational Vibration Requirements for Communications Equipment

Alliance for Telecommunications Industry Solutions

Approved May 11, 2017

Abstract

This standard specifies covers the minimum operational vibration criteria for communications equipment. It is the intent of this standard to utilize the latest version of ATIS standards that are referenced. It is also the intent to utilize (where appropriate) newer versions of other standards or documents that are referenced provided they do not conflict with the intent of this standard.

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 Telecommunication Industry Solutions (ATIS) serves the public through improved understanding between providers, customers, and manufacturers. The Sustainability in Telecom: Energy and Protection (STEP) Committee – formerly the Network Interface, Power, and Protection (NIPP) Committee— engages industry expertise to develop standards and technical reports for telecommunications 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 identifiable 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 roster:

- E. Gallo, STEP Chair (Ericsson)
- J. Fuller, STEP Vice Chair (AT&T)
- C. Forbes, STEP NPP Chair (NTS)
- C. Von Hagel, STEP NPP Vice Chair (Intertek)

The Network Physical Protection (NPP) Subcommittee was responsible for the development of this document.

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American National Standard for Telecommunications –

Operational Vibration Requirements for Communications Equipment

1 Scope, Purpose, & Application

1.1 Scope

This standard covers the minimum operational vibration criteria for communications equipment. This includes, but is not limited to, equipment intended for deployment in buildings (e.g., central office, data center, huts, and vaults) and equipment in outside plant environments. Examples of such equipment include, but are not limited to:

- Switches
- Routers
- Transport Equipment
- Power Equipment
- Servers
- Optical Network Units (ONU)
- Optical Network Terminal (ONT)
- Set Top Boxes
- Power over Ethernet Devices (PoE)
- Remote Terminals

This standard defines criteria for operational vibration environments during which the equipment must operate as intended and be free from physical damage.

1.2 Purpose

The purpose of this standard is to provide the service providers, end-users, manufacturers, test labs, etc., a means of evaluating communications equipment's resistance to vibration in its operational configuration. This standard also provides the functional and test report criteria necessary for proper evaluation by interested parties, and those intending to deploy equipment.

1.3 Application

This standard applies to equipment intended to be installed and utilized by service providers, end-users, manufacturers, etc.