ATIS-0600063

ATIS Standard on -

Guidelines for Environmental Testing and Evaluation of Communication Equipment

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Alliance for Telecommunications Industry Solutions

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Abstract

This guideline is a high-level review of the ATIS test requirements for communication equipment to assist the user in choosing the appropriate ATIS standards and test specifications for equipment and application. The document includes guidelines for choosing test classification for indoor and outdoor environments. This document is limited to physical protection and environmental stresses; other documents might be required for full qualification.

Foreword

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.

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. The word may denotes an optional capability that could augment the standard. The standard is fully functional without the incorporation of this optional capability.

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 it approved this document, STEP, which is responsible for the development of this Standard, had the following leadership:

E. Gallo, STEP Chair (Ericsson)
J. Fuller, STEP Vice Chair (AT&T)
C. Forbes, STEP NPP Chair (National Technical Systems)
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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1 Scope, Purpose, & Application

1.1 Scope

This guideline is for use as a reference guide for physical and energy efficiency of both indoor and outdoor equipment. The intent of the guideline is to be a reference guide and not for specific testing guidance of the equipment. This guideline is designed to refer the interested parties to applicable test standard(s).

1.2 Purpose

The purpose of this guideline is to provide interested parties a roadmap through the suite of ATIS standards. It is meant as a roadmap and the expectation is that the referenced document in each table shall be used to perform the testing. The reference document will contain the actual test parameters, duration, methods, and tolerance to be applied during the testing phase. The information supplied in this guideline alone is not sufficient to perform the testing in accordance with the referenced documents.

Interested parties will utilize the ATIS requirements, referenced throughout the guideline, for designing and providing communications providers and suppliers with industry compatible equipment. Testing facilities, manufacturers, and end users of the equipment will utilize the guideline for equipment qualification advice and assurance that all qualification and testing requirements were performed and met.

1.3 Application

This guideline is broken down into test scenarios dealing with individually qualification of equipment. Each table contains a list of ATIS tests and standards to be followed for each individual test scenario.

Environmental Class 1 Equipment (as defined in ATIS-0600010.01):

- ***Shelf-Level Equipment Used Indoors*** - This table is for guidance for equipment being installed inside a temperature-controlled environment. The equipment is intended to be installed inside Universal Cabinets and Framework (UCF) frames throughout the testing. The controlled temperature environment can include, but is not limited to, Communications Carrier Space, Mobile Telecommunications Switching Offices (MTSOs), Huts, Controlled Environmental Vaults (CEVs), and customer premises locations.
    - Examples of equipment that might be located in these environments include:
        - Circuit cards/line cards installed inside a rack-mountable chassis.
        - Any type of equipment that is designed to be mounted in a frame/rack/UCF and not attached to the floor.

- ***Wall Mount or Standalone Equipment Used Indoors*** - This table is for guidance for equipment being installed inside a temperature-controlled environment. The controlled temperature environment can include, but is not limited to, Communications Carrier Space, MTSOs, Huts, CEVs, and customer premises locations.
    - Examples of equipment that might be located in these environments include:
        - Inside wall-mounted equipment.
        - Inside table top equipment.