



ATIS-0600311.2017 (R2023)

DC Power Systems –  
Telecommunications Environment Protection

AMERICAN NATIONAL STANDARD FOR TELECOMMUNICATIONS



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## ATIS-0600311.2017(F0023), DC Power Systems – Telecommunications Environment Protection

Is an American National Standard developed by the **Network Power Systems (NPS)** Subcommittee under the ATIS **Sustainability in Telecom: Energy and Protection Committee (STEP)**.

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American National Standard for Telecommunications

**DC Power Systems –  
Telecommunications Environment Protection**

**Alliance for Telecommunications Industry Solutions**

Approved December 23, 2016

**American National Standards Institute, Inc.**

**Abstract**

This standard addresses the installation of dc power systems within controlled or limited access areas that convert commercial ac to dc voltages of 160 volts or less and those that convert from one dc level to another of 160 volts or less.

## Foreword

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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.

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Suggestions for improvement of this document are welcomed. 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 was responsible for its development, had the following leadership:

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American National Standard for Telecommunications –

# DC Power Systems – Telecommunications Environment Protection

## 1 Scope, Purpose, & Application

### 1.1 Scope

The standard addresses the installation of dc power systems within controlled or limited access areas that convert commercial ac to dc voltages of 160 volts or less and those that convert from one dc level to another of 160 volts or less.

This standard identifies reasonable means of minimizing hazards associated with the interconnection of dc power systems. Compliance with the standard will not assure the absence of hazards or harm resulting from the installation, interconnection, or operation of dc power systems.

### 1.2 Not Covered

Alternating current distribution and equipment that is part of the telecommunication power distribution system will not be covered by this standard. This standard will not address individual pieces of equipment such as standby ac equipment, dc to ac inverters, power supplies, or power supplies embedded in telecommunications equipment.

### 1.3 Purpose

This document is a standard for use in the design, engineering, installation, and acceptance of dc power systems for telecommunications environments.

### 1.4 Application

The dc power system protection standard shall be applied to the engineering, installation, and acceptance of centralized dc power systems owned or operated by exchange and interexchange carriers. This standard is not intended to be a specification or an instruction manual for untrained persons.

The wire sizes in this standard are based on copper conductors. If other materials are used, the size shall be adjusted accordingly.

DC power systems existing prior to the date of this standard shall not be required to comply with its requirements.

## 2 Normative References

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

International Building Code (IBC).<sup>1</sup>

<sup>1</sup> Available from the International Conference of Building Officials, 5360 South Workman Mill Road, Whittier, CA 90601.