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**Product Environmental Requirements for Cable
Telecommunications Facilities**

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140 Philips Road
Exton, PA 19341

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1 Introduction

This specification provides physical, environmental, electrical and sustainability requirements for equipment deployed in mission critical cable system headends, hub sites and data centers.

1.1 Purpose

The specification purpose is to define product environmental and sustainability requirements 1) by referencing existing international standards, 2) by using requirements from cable operator specifications, and 3) by adding cable system specific requirements as needed. It is not the intent of this document to replace existing standards or cable operator requirements.

1.2 Scope

This specification defines product physical, environmental, electrical, and sustainability requirements during transportation, storage, operation, and disposal. The specification is limited to indoor shelf, frame, rack, and cabinet level mission critical cable systems equipment. Facilities for which this specification generally applies are network data centers and cable headends. This specification also applies to unmanned or remotely monitored distribution hubs where hub location, construction, and HVAC capabilities can result in less tightly controlled ambient operating climates and longer duration environmental stresses. The specification does not address requirements for outside cable plant equipment.

1.3 Target Equipment

Example equipment includes CMTSSs, receivers, modulators, video encoders, multimedia gateways, servers, routers, switches, network equipment, network storage units, edge routers, add-drop multiplexors and edge QAMs. Uninterruptable Power Supplies are not in scope for this document.

1.4 Requirements Syntax

Throughout this document, specific words are used to define the requirements significance. These words are:

"shall"	This word means that the item is an absolute requirement of this specification.
"shall not"	This phrase means that the item is an absolute prohibition of this specification.
"should"	This word means that there may be valid reasons in particular circumstances to ignore this item, but the full implications should be understood and the case carefully weighed before choosing a different course.
"should not"	This phrase means that there may exist valid reasons in particular circumstances when the listed behavior is acceptable or even useful, but the full implications should be understood and the case carefully weighed before implementing any behavior described with this label.
"may"	This word means that this item is truly optional. One vendor may choose to include the item because a particular marketplace requires it or because it enhances the product, for example; another vendor may omit the same item.