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Hybrid Fiber Coax Outside Plant Status Monitoring – Physical (PHY) Layer Specification v1.0

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DOCUMENT HISTORY

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1 Introduction

The Hybrid Fiber Coax (HFC) Outside Plant (OSP) Physical (PHY) Layer Specification is part of the suite of specifications developed by the Hybrid Management Sub-Layer (HMS) subcommittee under the SCTE. The purpose of the HMS specifications is to support the design and implementation of interoperable management systems for evolving HFC cable networks. The HMS Physical (PHY) Layer Specification describes the physical layer portion of the protocol stack used for communication between HMS-compliant transponders interfacing to managed outside plant network elements (NE) and a centralized headend element (HE).

1.1 Scope

This specification describes the PHY layer requirements that must be implemented by all *Type 2* and *Type 3* compliant OSP HMS transponders on the HFC plant and the controlling equipment in the headend. Any exceptions to compliance with this specification will be specifically noted in this document as necessary. Refer to **Table 1** for a full definition of the Type Classifications.

Note

Electromagnetic Compatibility (EMC) is not specified in this standard and is left to the vendor to ensure compliance with local EMC regulatory requirements. Other than operating temperature, physical parameters such as shock, vibration, humidity, etc., are also not specified and left to the vendor's discretion.

1.2 Transponder Type Classifications

Transponder type classifications referenced within the HMS suite of specifications are defined in **Table 1**.