

Mini-SAS HD Active Optical Cable Assemblies

INTEROPERABILITY, RELIABILITY, COMPATIBILITY

Amphenol's Mini-SAS HD Active Optical Cable fully complies with SAS 3.0 and SAS 4.0 industry standards and the SFF-8636 interface standard. Used primarily for external Enterprise storage applications (box-to-box, server-to-storage, server-to-switch), this cable is part of Amphenol's comprehensive Mini-SAS HD product offerings that address all board connector and cabling applications, from 1 to 100 meters. This wide offering gives system architects full flexibility and a complete range of products to meet all high-speed storage and high-density IO system needs.

- Fully compliant to SAS 3.0 (12Gb/s) and SAS 4.0 (24Gb/s) industry standards.
- Support PCI Express® Gen 3.0 (8Gb/s) & Gen 4.0 (16Gb/s) applications.
- Operate up to 96Gb/s aggregate bandwidth.
- Transmission distance up to 100m (MMF)



TARGET MARKETS



FEATURES

- Optical connectivity enables length up to 100m
- Full SAS 3.0 & SAS 4.0 compatibility ensures plug and play operation
- Supports PCIe® Gen 3.0 and Gen 4.0 applications
- 8 cores multimode loose fiber with a 3.0mm round jacket
- Backwards compatible to prior generation for interoperability with SAS 2.1, SAS 3.0 & SAS 4.0 equipment
- Accessible through two-wire Serial Interface
- Programmable output amplitude, pre-emphasis
- Customized labeling and EEPROM memory map extensions
- 0°C to +70°C operating case temperature

BENEFITS

- Allow for more flexible installation and build-out options
- Supports four SAS channels per connection for efficient installations
- Allow for easy cable routing in any direction without concern of signal loss
- Hybrid connections are possible between SAS 4.0, SAS 3.0 and SAS 2.1
- Allows for connection discovery and cable management and improved serviceability
- Provide maximum flexibility for optimization
- Full flexibility to meet specific requirements
- Supports commercial temperature range

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TECHNICAL INFORMATION

MATERIAL

- OM3 and OM4 fiber cable is selectable with plenum rated or LSZH rated
- Die Cast Covers: Zinc with Nickel plating
- Halogen-free PCB material

ELECTRICAL PERFORMANCE

- Power Supply Voltage: 3.3V
- Data Rate Per Lane:
 - 12Gb/s for SAS 3.0 & 24Gb/s for SAS 4.0
 - 8Gb/s for PCIe® Gen 3 & 16Gb/S for PCIe® Gen 4
- Transmitter Type: 850nm VCSEL
- Receiver Type: PIN-diode
- Bit Error Rate: < 10⁻¹²

MECHANICAL PERFORMANCE

- Mating Force: 150N max.
- Unmating Force: 50N max.
- Durability: 250 cycles

ENVIRONMENTAL

- RoHS 6/6 Compliant
- Storage Temperature Range: -40°C to 85°C
- Operating Case Temperature Range: 0°C to 70°C
- Storage Humidity Range: 0 to 85% RH
- Operating Humidity Range: 0 to 85% RH

SPECIFICATION

- SFF- 8449: Management interface for SAS shielded cables
- SFF-8636: Common management interface
- SFF- 8644: Mini-Multilane shielded integrated high density connector

PACKAGING

- ESD Bag

TARGET MARKETS/APPLICATIONS

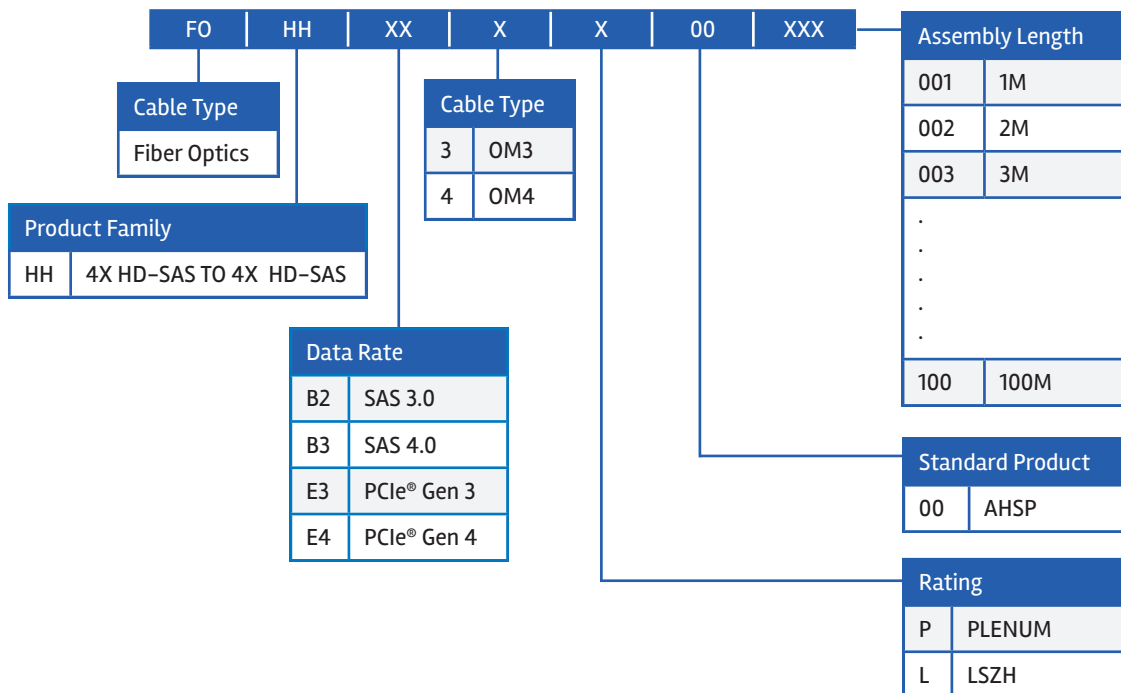


External Storage Connections



Enterprise Storage
SAS 4.0 & SAS 3.0
PCIe® Gen 4 & PCIe® Gen 3

PART NUMBER SELECTOR



HS10MINISASHDAOC0124EA4