

Certification for Power over HDBaseT (PoH) Cables

Recognized Test facility for the HDBaseT Recommended Cables program

HDBaseT technology offers the unprecedented opportunity to merge uncompressed full HD digital video, audio, 100BaseT Ethernet and various control signals onto a single 100m 4-pair communications cable equipped with RJ-45 connectors.

In addition, Power over HDBaseT (PoH) power-delivery technology has been developed to facilitate the powering of devices such as televisions and monitors up to 100 watts. The ability to provide power and signal to the device allows for simpler installations.

With increasing power levels, the heat generated within the cable increases as well. This is especially true when the cables are bundled together which is typical in the installation. It is a safety concern when cables are operated above their temperature rating under these conditions. In addition, it is well known that higher copper wire temperatures increase cable insertion loss that can adversely affect cable performance.

With a view to address this concern, UL has worked with HDBaseT Alliance to develop a certification program for Power over HDBaseT cables. The requirements are based on the HDBaseT compliance test specification for their Recommended Cables program and a heating test developed by UL based on our extensive experience with "Limited Power" (LP) cables.

Under the Certification program, UL will test and evaluate the HDBaseT cables in accordance with a new UL Outline of Investigation for PoH Cables, UL4299. The cables are tested in a specified bundle at 100Watts and the HDBaseT parameters are verified at the temperature measured during operation.

In addition to the PoH cable certification program, UL has also recently been approved by the HDBaseT Alliance as a Recognized Testing Facility for their Recommended Cables program. Under this program, cables are tested in accordance with HDBaseT compliance test specifications to make sure they can effectively transport HDBaseT protocols.

Program benefits

- › Provides an uncomplicated way to help ensure installations are suitable for the increasing power levels and addresses safety concern.
- › Provides a consistent test method for evaluating cable performance when subjected to elevated temperatures caused by power handling and bundling.
- › Test-based requirements allow for innovation in cable design.
- › Cables are distinguished with an industry recognized UL certification Mark and its Follow-up Program that covers factory inspection and market surveillance. This helps ensure compliance and reduces risk to all stakeholders in the supply chain.
- › Customers can work directly with UL to have communications cables evaluated under both UL PoH Certification and HDBaseT Recommended Cables programs.

To submit cables for the HDBaseT's Recommended Cables Program or Power over HDBaseT Cable certification or for additional information, please contact:

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