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Learn the Whats, Hows, and Whys of HDBaseT

The Next Chapter of HDBaseT Connectivity with HDBaseT-IP

1. What?

HDBaseT is the ultimate solution for in-room connectivity, including residential and corporate settings, education and more. With the introduction of HDBaseT-IP, we can easily and seamlessly extend HDBaseT from in-room to cross-campus applications.

The existing HDBaseT standard allows for the convergent delivery of the 5Play feature set – audio & video, Ethernet, controls, USB 2.0 and up to 100W of power – over a single LAN cable (Cat6 or above), for up to 100m/328ft.

Setups that require the day-to-day transmission of content for longer distances, or need to connect different rooms in different buildings – such as corporate and educational cross-campus installations – can now rely on a standardized technology that guarantees interoperability among different vendors beyond the transport layer.

2. How?

HDBaseT-IP is an extension of the leading HDBaseT standard, with added support for a new physical layer (PHY) based on Ethernet and IP. HDBaseT-IP takes HDBaseT packets and overlays them with IP protocol, expanding the possible use cases and installation scenarios. For example, HDBaseT-IP is particularly suitable for cross-building/campus installations. It also brings support for multicasting and broadcasting, for installations that require duplication of the video.

HDBaseT-IP leverages existing pro-AV installations, and shares a common management and control mechanism for end-to-end system optimization.

HDBaseT-IP is also compatible with visually lossless compression solution which expands the horizon of resolution compatibility from HDMI 1.4 to HDMI 2.0.

3. Why?

HDBaseT-IP unbounds today's transmission limitations without the need for a brand-new technology by leveraging the existing install base. Standardizing and consolidating the technology under the HDBaseT umbrella facilitates compliance and interoperability among different products, vendors, and solutions.

HDBaseT-IP adapts to any use case topology physical interface, with unprecedented modularity and breadth of scope, supporting either 10G, 5G, 2.5G, or even 1G Ethernet infrastructure.

As a full stack solution, from physical infrastructure to highest application level, HDBaseT-IP delivers optimized cross-layer transmission for ultimate interoperability, efficiency, and unparalleled flexibility, with no discernible impact on quality and performance.

HDBaseT-IP continues to expand the possibilities of AV connectivity by offering the highest quality solution for video transmission over the simplest infrastructure.