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Learn the Whats, Hows, and Whys of HDBaseT

Simplifying In-vehicle Connectivity with HDBaseT Automotive

1. What?

HDBaseT Automotive is a transmission standard for in-vehicle connectivity. It is the only technology that enables up to 6Gbps tunneling of video & data, with native networking capabilities over 15m (50ft) of a single unshielded twisted-pair (UTP) cable. This combination of high bandwidth, top performance, feature-rich capabilities and low-cost, existing infrastructure makes HDBaseT the definite solution for in-vehicle connectivity.

HDBaseT Automotive brings a modular solution, for reduced inventory, lower cost and future-proof setup. HDBaseT Automotive is a derivative of HDBaseT, a mature, proven and standardized technology for the transmission of ultra-high-definition audio & video, controls, Ethernet, USB and power in the consumer electronics and professional audiovisual markets.

2. How?

HDBaseT Automotive delivers high-bandwidth content with near-zero latency. This guarantees real-time transmission of content from cameras, videos, smart phones, and more, improving performance. It also simplifies the underlying infrastructure for USB connectivity, and brings native networking capabilities, supporting multi-hop and multistreaming packet switching.

HDBaseT Automotive tunneling is done over UTP cables. Although UTP cables are notoriously prone to EMC interference, HDBaseT's adaptive mechanism allows high-quality transmission, without impact on performance, for a highly robust solution.

3. Why?

To deliver the connected car experience that drivers and passengers expect, the underlying vehicle infrastructure must be able to deliver ultra-high-definition & high bandwidth content (whether infotainment or Advanced Driver Assistance Systems – ADAS), with virtually zero latency, over the simplest, lowest-cost and lowest-weight infrastructure.

Without the right infrastructure, there is no way to address latency while delivering high-bandwidth content. With latency, cameras and sensors are too dangerous to rely on. In addition, by relying on the simplest available infrastructure, HDBaseT Automotive can reduce a major weight and cost component, without affecting performance in such an EMC-prone environment.