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Learn the Whats, Hows, and Whys of HDBaseT

The Ultimate Solution for Industrial Computing Connectivity with HDBaseT Industrial

1. What?

Industrial PCs (IPCs) are ruggedized devices mostly used in industrial settings, such as manufacturing plants, production lines, and factory sites. These are usually loud, hot, dusty environments, with high vibration and/or electromagnetic interferences. As such, IPCs must perform at a higher level in terms of reliability, interoperability, robustness and usage patterns. IPCs rely on future-proof technologies.

Several IPCs function as passive-terminal displays (zero-client units), for process control, data gathering and transfer, logistics, and monitoring. These IPCs are a more cost-effective option in the plant setting, and demand low-latency and no jitter for proper operation and control of manufacturing activities.

2. How?

HDBaseT is the one-cable solution for Industrial PC connectivity, addressing the critical need for zero-latency, robustness, long distance and connectivity.

HDBaseT technology allows for the convergent delivery of the 5Play feature set – uncompressed UHD audio & video, Ethernet, controls, USB 2.0 and up to 100W of power over a single LAN (Cat6 or above) cable, for up to 100m/328ft, or fiber for even longer distances. LAN cables are plug-and-play, ubiquitous and inexpensive, providing an easy-to-install solution and allowing for easy expansions. HDBaseT allows transmission of long-distance USB signals with intrinsic support for a range of devices and sources, as well as compatibility with various manufacturing control signals and protocols.

3. Why?

HDBaseT for IPCs is the ideal solution for factory floors where there is a need for real-time, long-distance connectivity from nodes to a central office.

By using a single inexpensive CatX cable, HDBaseT reduces cable clutter for a safer and simpler infrastructure, including easy installation with field termination and drag-chain compatibility.

HDBaseT delivers uncompressed content, eliminating latency for a better user-experience.

HDBaseT's USB support guarantees interactivity and support of KVM functionality, enabling zero-client units for a more cost-effective solution in the factory floor.