SOLUTION OVERVIEW

Networked Video Connectivity Solutions

Pleora's rich portfolio of solution elements delivers a robust, end-to-end GigE Vision® compliant platform that can be tailored to meet the mission-critical, real-time application needs of OEMs and systems integrators in the military, medical, and manufacturing sectors

What is a networked video connectivity solution?

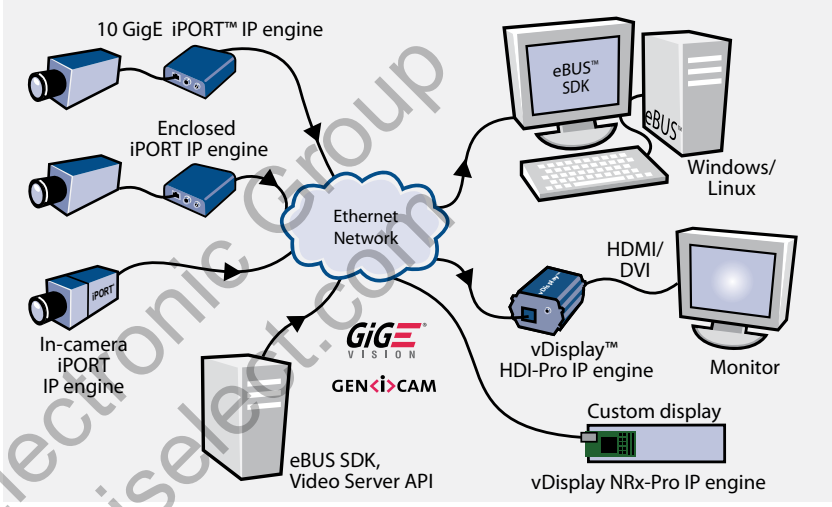
It is a network dedicated to the transport of high-resolution video. All elements – such as image sensors, cameras, computers, video receivers, video servers, control units, and displays – are connected to each other by one or more switches, and everything uses the same standard framework to transmit or receive video and control data. It is a new class of network that meets growing demand for scalable, real-time video systems based on meshed architectures, while minimizing the need for costly specialized equipment and custom cabling.

What comprises a Pleora networked video connectivity solution?

Pleora's solutions are built for performance. They are based on a rich portfolio of hardware, software, and firmware that has been field-hardened in thousands of real-world deployments. These elements are fully compliant with the open, global GigE Vision® standard.

What platform do Pleora's solutions use?

Pleora's solutions are based on Ethernet – the world's lowest cost, most ubiquitous data transport platform. Ethernet offers unmatched networking flexibility, supports bandwidths of up to 10 Gb/s, and easily accommodates the addition of new network elements. Its reach extends up to 100 meters between network nodes over standard Cat 5/6 copper cabling, or further with switches or fiber.



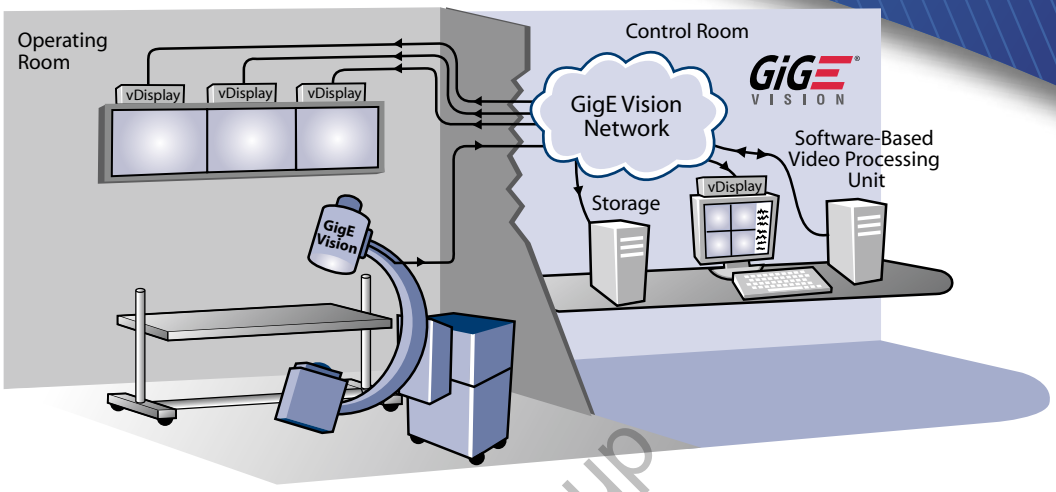
Pleora's solutions leverage the networking flexibility of the switched Ethernet architecture

- **iPORT™ IP engines** – Highly optimized, compact transmitter hardware that packetizes almost any video output from a camera or sensor into an Ethernet-compatible format and sends it in real time with low, consistent latency to one or more network end points.
- **vDisplay™ IP engines** – Compact video receiving hardware that transfers data from a GigE Vision compliant network link directly to a standard monitor or custom hardware for display and/or processing, eliminating the need for PCs at viewing stations.
- **eBUS™ SDK** — A feature-rich toolkit that provides the building blocks needed to quickly and easily design high-performance video applications that consume minimal CPU resources.
- **AutoGEV™ XML generation tool** – A unique XML management utility for creating GenICam compliant devices.

Pleora Technologies

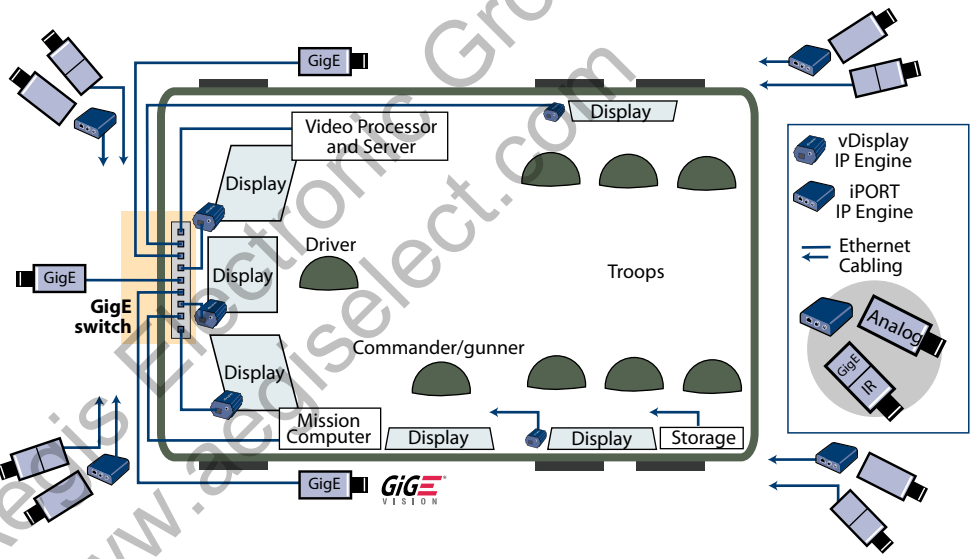
Medical Imaging

Imaging data from the C-arm is converted to IP packets for reliable, real-time transport over a standard GigE network. The video processing unit in the control room highlights areas of interest in the images and streams them back over the network to displays in the operating room and other destinations, all with low, consistent latency.



Military

Video from a mix of standard and specialty analog and digital cameras mounted on the vehicle is transported reliably with low, consistent latency over a GigE network to mission computers, servers, and displays inside the vehicle. Images from IR cameras of differing wave lengths are fused together by the video processor to provide vehicle occupants with enhanced vision.



Automated Industrial Imaging

Video from the GigE Vision cameras in the gantry is streamed in real time to the GigE switch and multicast to the rack-mounted PCs. Each PC analyzes the video for a different type of defect. Results are forwarded to the master controller PC, which aggregates the results and sends grading instructions to the GigE Vision stamping device.