TECHNOLOGY AT WORK Control Rooms



Black Box Emerald KVM-Over-IP Platform

The Black Box Emerald KVM-over-IP platform is an infinitely scalable universal access system, allowing users to connect to physical and virtual machines with anywhere, anytime IP access over an existing IP network, WAN, or even the Internet. Emerald's

robust security features, power and connectivity options add resilience and simplify setup, with intuitive interfaces for flexible layout configuration and

agile switching. Power redundancy capability and two-network link redundancy (copper and fiber) support its Emerald traditional KVM DP receivers. A fail-safe platform with no single point of failure, it has security and compliance features that protect against internal and cyber threats. These advanced security features and low-bandwidth consumption open new ways to incorporate remote users and distributed control rooms. Interoperability between 4K and HD video, one-touch control room setups, and a high degree of automation through Emerald's APIs provide flexibility. Signal and format management alows users to deliver content with an innovative look and feel. Organizations can leverage existing IT equipment, facilitating control and monitoring through the Boxilla KVM Manager's dashboard. Small form-factor DisplayPort units ease installation, much like the Emerald Remote App, by providing access to as many as nine concurrent Emerald connections from a Windows 10/11 laptop.



Matrox Vion

The Matrox Vion IP video gateway solves the common problem of moving from one IP video format to another. The first Matrox Video product to support NDI, Matrox Vion transcodes between NDI6, NDIHX3, IPMX, ST 2110, SRT, RTSP, and other formats and codecs for flexible

routing workflows, including NDI over SRT, that boost productivity and enable new on-prem and cloud IP-to-IP workflows. With support for HEVC 4:2:0, 4:2:2 and 4:4:4 10 bit, and H264 codecs, plus optional SDI/HDMI inputs, SDI/HDMI I/O, the IP-to-IP video gateway is ideal for demanding collaboration applications. With flexible, low-latency multi-channel encoding, decoding, transcoding, and processing, the gateway handles color space conversions and changes to streaming protocols and bitrates.



Jupiter PixelNet Standalone Node

This is the latest addition to the Jupiter System's Pixelnet family of video processors. It's a subset of video wall controller nodes that provides secure, uncompressed transport of pixels end to end with unlimited scalability for the largest and most demanding multi-wall command and control applications. For security, PixelNet utilizes Layer2 transport protocol as opposed to the majority of AVoIP systems that are using Internet Layer3 protocols. It recently achieved JITC certification for military-grade deployments. The PixelNet Standalone Node is unique in its small size; it has been engineered to be low profile and to fit on an operator desk. The engineering on the internal ventilation and component placement makes it one of the smallest video processors with similar capabilities of the market. The intent of developing a single Standalone Output Node capable of being displayed only on a single screen (regardless of its size) - is aimed at reducing the cost of certain deployments and offer flexibility of installation, making the PixelNet platform more versatile than ever in their structure.

Datapath VSN V3

Datapath has introduced Intel's powerful Xeon CPU to its VSN V3 video wall processor to meet the demand for high resolution, high demand Control Room applications. Datapath's VSN systems are used by governments and organizations around the globe, in industries ranging from defense and network security to utility and blue-light services. Already available with Core i9 or i7 processing power, the addition of a Xeon processor now gives the VSN V3 a further CPU option, with a clock speed of 4.8GHz and a 16MB cache. Memory options are

the highest in the Datapath range – up to 128GB, with USB 3.0 included to support high transfer speeds and connectivity to the latest devices. Along with a choice of processing power, each VSN V3 can be preconfigured with Datapath Image graphics, Vision capture, and SQX IP decode cards for specific project requirements of any size. The VSN V3 chassis optimizes airflow to improve heat management and reduce noise. This design, along with a new platinum rated redundant power supply, makes this the most efficient VSN to date. The latest VSN backplanes are designed by Datapath engineers to ensure stability and cool operating temperatures. The chassis also includes unique hot-swappable fan technology, enabling uninterrupted 24/7 use and maintenance in the most critical installations.

