

# Redesigning The IP KVM Switch For High-Performance Applications

Impressive Features Make The Raritan Dominion KX III The World's Best High-Performance KVM-over-IP Switch

**THE DOMINION® KX III** is the Lamborghini of IP KVM switches. A sleek black sculpted exterior that on the inside offers some impressive specs: 1,920 x 1,080 HD resolution with 24-bit color at 30 frames per second; Web-based BIOS-level access and control for eight to 64 servers; security protocols like FIPS 140-2 encryption; smart-card/CAC authentication; IPv6; and DVI/HDMI/DisplayPort/VGA connections for digital and analog video, audio, virtual media, blade server support, and mobile access.

This switch performs reliably even under grueling conditions. But in an age when software-based remote access systems (RDP, VNC) and embedded service processors (iLO, DRAC, RSA) are prevalent, why does Raritan continue to invest resources into maximizing the performance of a device many IT departments consider old-fashioned?

“While software-based remote access tools and embedded services processors (ESPs) have been popular with IT in recent years, predictions that they would completely replace KVM switches have not come to pass. KVM switches remain essential for many customers due to their unique features and capabilities, and their adherence to stronger security protocols,” says Richard Dominach, senior product manager at Raritan.

## KVM Remains Essential

For routine maintenance, real-time troubleshooting, and repair,

IT administrators, lab managers, and network managers need to be able to access and control multiple computer systems that are often geographically dispersed. Although software-based tools, ESPs, and KVM provide



remote access and control capabilities, the former two offer shaky performance and reliability and frequently introduce unexpected security liabilities.

“Software-based systems have well documented security risks. According to one study, poorly configured remote access software is responsible for as much as 62% of all security breaches. Recent research has also highlighted some shocking vulnerabilities in ESPs that makes it possible to log in with no authentication whatsoever,” Dominach says. “We’ve seen several high-profile data breaches over the last several years, with severe financial ramifications on the organizations’ bottom lines, so IT departments really need to consider the risk they’re taking by introducing these tools into their network.”

Additionally, software-based tools must be installed and maintained on every device being accessed, compete with production applications for system resources, and require the

target computer’s operating systems and production network to be running properly for access. Many ESPs offer out-of-band access, but this requires an additional LAN port and hefty licensing fee for what vendors consider

to be an additional feature. KVM inherently offers out-of-band, BIOS-level access, which is often required for rebooting and other emergency action.

## High-Performance Demands

KVM switches have traditionally been used by IT professionals to access servers that store information and run critical business services. Features such as BIOS-level access; emergency access; and “virtual media” for loading software, running diagnostics, and rebooting have been a standard for some time.

Although most KVM switches are good enough to handle those traditional needs, many applications utilizing video streaming, audio, and high-resolution graphics require a KVM-over-IP solution that can deal with high performance demands.

The KX III’s next-generation video processing engine supports not only traditional remote server administration applications but also dynamic broadcast applications that require 1,920 x 1,080

resolution, 24-bit color, digital audio, DVI-based digital local port for at-the-rack access, and dual monitors. Plus, the KX III’s streaming video capabilities enable a 1080p movie (with audio) to be viewed at 30 frames per second over an IP network.

## Dynamic Applications

The KX III’s next-generation video processing capabilities support resource-intensive applications in multiple industries, including broadcast, government, military, security, financial, scientific, transportation, industrial, and utility firms.

“In the past, expensive and inflexible systems were the only solutions available for applications that require remote viewing of HD video and audio. You had to go to the equipment in order to access it,” says Dominach. “The KX III uniquely provides remote IP access to both general server administration and dynamic resource-intensive applications that use video and audio.”

## Raritan Dominion® KX III

- 1,920 x 1,080 HD resolution and 24-bit color at up to 30 FPS
- Web-based, BIOS-level access and control for up to 64 servers
- DVI-based digital local port for responsive performance



(800) 724-8090

[www.raritan.com/kxvideo](http://www.raritan.com/kxvideo)