

# Features and Benefits

## Dominion KX<sup>®</sup> II



Features	Benefits
<b>Hardware Features</b>	
Next Generation Hardware Architecture	Dominion KX II is a true next generation switch with an advanced hardware and software architecture. This innovative design enables new levels of KVM-over-IP performance, reliability, usability, compatibility and security.
High Performance, Next Generation Video Hardware	Dominion KX II's KVM-over-IP engine uses Raritan's next generation technology providing users with virtual at-the-rack performance. Next generation features include ultra-fast screen refresh, 1600x1200 remote resolution, advanced color calibration and per server video optimization.
Dual Power Supplies with Failover	For increased reliability and redundancy, all Dominion KX II models have dual AC inputs, dual power supplies and automatic failover to support the redundant power distribution used in enterprise data centers. If a power supply fails, the customer will be notified via front panel LED, SNMP trap, log message or via the administrative manager.
Four USB Ports for Keyboard, Mouse and USB Media	The Dominion KX II has four USB 2.0 ports, three on the back panel and one on the front panel for local keyboard, mouse and USB media.
Dual Gigabit Ethernet Ports with Failover	Provides high availability with dual gigabit Ethernet ports for redundancy. Should one Ethernet switch or interface card fail, Dominion KX II will automatically failover to the other port and continue operating.
Multiple Hardware Models	Multiple hardware models enable simultaneous access by one, two or four remote users to 16, 32 or 64* servers. Raritan is the first and only vendor to provide a 64 port digital KVM switch.
1U or 2U Form Factor	The Dominion KX464 is a 2U solution. Other KX II models are only 1U in height. Dominion KX II is extremely rack-efficient.
Cat5 Cabling	Dominion KX II interconnects with each server via standard, economical Cat5 (UTP) cabling. Servers may be located up to 45 meters from the Dominion KX II unit.
Multiplatform Computer Interface Modules (CIMs)	Dominion KX II supports multiplatform CIMs to connect to PS/2 <sup>®</sup> , USB and Sun servers. Dominion CIMs operate at distances of up to 45 meters from the KX II switch. The new KX II USB CIM, which supports virtual media and Absolute Mouse Synchronization <sup>™</sup> , operates at distances up to 30 meters from the KX II switch.
Modem Port for Emergency Access	All Dominion KX II models have an integrated modem port for emergency remote access if the data network is unavailable.
Configurable Hardware Reset Button	Dominion KX II contains an administrator-configurable hardware reset button on the back panel.

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<b>Connectivity Features</b>	
One, Two or Four Concurrent Remote IP Users	Dominion KX II provides KVM-over-IP access to one, two or four simultaneous, remote users depending on the model purchased. Raritan provides a wide variety of KX II models to meet most customer needs and budgets. This is achieved while allowing full, unblocked local port access.
16, 32 or 64 Server Ports	Users can connect up to 16, 32 or 64 servers to each Dominion KX II via Cat5 cabling. Raritan is the first KVM-over-IP vendor with one, two and four channel 32 port models and the first to market with a 64 port digital KVM switch.
Remote Network Access / KVM-over-IP	Dominion KX II extends the Dominion KX's award-winning video compression circuitry, the industry's highest-performing KVM-over-IP technology. Users can access Dominion KX II from anywhere on the network (LAN, WAN, Internet, dial-up), allowing administrators to troubleshoot, reconfigure, reboot and even power cycle servers remotely.
Industry's First Browser Based Local Console Port	The Dominion KX II features the industry's first browser-based local access. With a common, browser-based interface and full management functionality at the local port, the KX II provides a consistent user experience that is easy to learn.
KX2-464 – The Industry's Highest Density Digital KVM Switch	The Dominion KX2-464 is the industry's first 64-port digital switch, providing the highest port density of any digital KVM switch. The KX2-464 provides KVM-over-IP access to up to 64 servers, spanning two to four racks. Featuring a 2U enclosure, dual Ethernet ports, dual power supplies with automatic failover, and SNMP management, the KX2-464 provides an enterprise-level solution that consolidates four standard KVM switches to reduce cost and administration.
Integrated, Remote Power Control – Up to Eight Power Strips per KX II	Users can power up, power down or power cycle servers connected to optional Raritan remote power control units. A system administrator can not only troubleshoot a server remotely, but also power cycle that server with a click of the mouse. This user-friendly, remote power control is available for up to eight power strips per KX II unit.
<b>Universal Virtual Media</b>	
All KX II Models have Virtual Media	The benefits of virtual media – mounting of remote drives/media on the target server to support software installation, remote booting and diagnostics – are now available in all the Dominion KX II models.
Virtual Media is available through a centralized management appliance, CommandCenter <sup>®</sup> Secure Gateway, as well as in Standalone Mode.	Customers can access Virtual Media through Raritan's CommandCenter Secure Gateway. But, unlike other solutions, Virtual Media is available standalone for customers not using a central management system.
Wide Variety of Supported Virtual Media Drives and Devices	Each Dominion KX II comes equipped with Virtual Media to enable remote management tasks using the widest variety of CD, DVD, USB, internal and remote drives and images. Unlike other solutions, the Dominion KX II supports Virtual Media access of hard drives and remotely mounted disks for added flexibility and productivity.
Secure Virtual Media with 128 Bit Encryption	Virtual Media sessions are secured using 128 bit AES or RC4 encryption.

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New USB CIM with Virtual Media, Absolute Mouse Synchronization™ and Firmware Update	The new D2CIM-VUSB CIM supports Virtual Media sessions to target servers supporting the USB 2.0 interface. Available in economical 32 and 64 quantity CIM packages, this new CIM supports Absolute Mouse Synchronization as well as remote firmware update.
<b>Client Access and Control</b>	
Universal KVM Client Access – Anytime, Anywhere, Anyhow	The Dominion KX II provides KVM access through the industry's broadest and most flexible range of operating systems, platforms and browsers, with no additional client license fees or cumbersome software licensing.
Next Generation Common User Interface	The Dominion KX II has a next generation, browser-based user interface for enhanced usability and productivity. This interface is common across the local port, remote access, management software as well as other Raritan products. This reduces training time and increases productivity.
Web Accessible Client	Users can access Dominion KX II via Web browser for anytime, anywhere access. Raritan's client software is automatically downloaded; this eliminates the need to install "client" software on each user desktop.
Multiplatform Client Access to KX I and KX II	Existing customers of the Dominion KX can use the multiplatform client to simultaneously access their existing KX switches as well as newly-purchased KX II switches.
Multiplatform Access and Control for Windows®, Linux®, Sun®/Solaris™ and Macintosh®	Raritan's Java™-based clients provide multi-platform access and control on Windows, Linux, Sun/Solaris and Macintosh desktops.
Leading Web Browser Support Including Firefox and Mozilla™	Raritan's client software supports the major Web browsers including Internet Explorer®, Firefox and Mozilla.
Standalone Clients Available	Standalone versions of the client software are available on the <a href="http://www.raritan.info">www.raritan.info</a> Web site for modem access and for users preferring an installed client.
<b>Virtual KVM Desktop™</b>	
Virtual KVM Desktop – A New Level of Access and Control	Raritan's Virtual KVM Desktop provides a new generation of KVM access and control that provides a connection to the target server virtually indistinguishable from a direct connection. The Virtual KVM Desktop is based on the following Raritan innovations: Full screen video, transparent keyboard handling, flexible video scaling and fast video switching.
Absolute Mouse Synchronization	The Absolute Mouse Synchronization feature is the ultimate mouse synchronization solution. For servers with a compatible USB mouse port, there is no need to adjust the mouse settings on the target server. This reduces installation time and enhances the Dominion KX II's plug-and-play nature. In addition, the remote and target server mouse pointers never go out of synchronization. This feature is enabled by the new D2CIM-VUSB virtual media CIM.
1600x1200 Remote Video Resolution	Dominion KX II provides 1600x1200 remote and local video resolution so even remote users can work with today's higher resolution monitors.
Full Screen Video Display	With the Dominion KX II's full screen video display, users appear to be directly connected to the target server. The user views the full video display from the target server without window borders or toolbars.

Features	Benefits
Flexible Video Scaling	In many instances, the user would like to “scale,” i.e. stretch or compress the target server’s video display to fit the display window on the client. With the Dominion KX II’s flexible scaling, the user is not restricted to fixed-size windows, but can drag the window border to the desired size, including small thumbnail views.
Intelligent Mouse Synchronization	Most KVM switches require the customer to manually adjust the mouse motion and mouse acceleration settings for all connected target servers for each KVM user. With the Dominion KX II’s Intelligent Mouse option, no such manual configuration is required for many servers. The system can automatically adjust to the server’s mouse settings. This further enhances the KX II’s plug-and-play operation.
Fast Video Switching	Once the Dominion KX II’s advanced video resolution detection has calculated a target server’s video characteristics, connections to the server occur almost instantaneously. This gives the KX II user immediate access in most cases to all connected servers.
Transparent Keyboard Handling	Transparent keyboard handling means that virtually all user keystrokes are sent to the target server and not processed by the desktop client. This key feature of the Raritan Virtual KVM Desktop obviates the need for most keyboard macros and allows the user to directly interact with the target server with a higher level of connectivity.
<b>Software Features</b>	
“Plug and Play” Appliance – Quick and Easy Setup	Dominion KX II is a completely self-contained system (i.e. an appliance). All KX II features, including authentication and Web access, are built into the unit and do not require the use of an additional server.
Automatic Color Calibration	The Dominion KX II provides automatic and manual color calibration that optimizes the screen display to provide vivid, lifelike colors to enhance productivity and reduce bandwidth.
15-bit Color Support	Dominion KX II’s 15-bit color support (32,000 colors) enables high video quality over the network. Multiple color modes, as well as greyscale, are available to connect via modem or low bandwidth link.
PC Share Mode	Up to eight users can connect and remotely access each connected server. This feature is very useful for administrator collaboration for teamed troubleshooting of servers.
Automatic and Manual Bandwidth Utilization	Video performance is automatically configured to match the available network bandwidth. With high speed LAN access, more bandwidth is available and higher quality video information can be sent resulting in better performance. When accessing via dial-up modem, Dominion KX II adapts to the limited bandwidth available. Users can also manually configure if desired.
Real-Time Server Status and Availability	Users can easily determine, via the user interface, if a given server is currently accessible/available.
<b>Security Features</b>	
AES Encryption	<p>The Dominion KX II utilizes the Advanced Encryption Standard (AES) encryption for added security.</p> <p>AES is a US government approved cryptographic algorithm that is recommended by the National Institute of Standards and Technology (NIST) in the FIPS Standard 197.</p>

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Video and Virtual Media Encryption	Dominion KX II securely encrypts the video stream in addition to keyboard and mouse data.
RADIUS, LDAP and Active Directory® Authentication	Dominion KX II integrates with industry-standard directory servers, such as Microsoft's Active Directory, using either the LDAP or RADIUS protocols. This allows Dominion KX II to use pre-existing username/password databases for security.
Configurable Strong Password Checking	The Dominion KX II has administrator-configurable, strong password checking to ensure that user created passwords meet corporate and/or government standards and are resistant to brute force hacking.
Local Authentication with User, Groups and Permissions	In addition to external authentication, the Dominion KX II supports local authentication. Administrators can define users and groups with customizable administration and port access permissions.
Multiple Security Features	Dominion KX II offers many additional security features including strong password checking, password aging, access control lists, inactivity timers, group permissions, per port authorization, etc.
<b>Management Features</b>	
Remote Management and Administration	Administrators can perform all management, administration and configuration operations, using a simple graphical user interface, from the convenience of their desktop.
Raritan's CommandCenter Integration	Like the rest of the Dominion Series, Dominion KX II features complete CommandCenter Secure Gateway integration, allowing enterprise users to consolidate all Dominion devices into a single logical system, accessible from a single IP address, and under a single management interface. The Dominion KX II also integrates with the new CommandCenter NOC service management appliances.
Dominion KX I Compatibility	Customers who have purchased Raritan's award-winning Dominion KX I switches can continue to use these switches together with the new Dominion KX II. Both CommandCenter Secure Gateway and Raritan's multiplatform client support seamless access and control of target servers and serial devices connected to the KX I and KX II digital appliances.
Paragon and Dominion CIM Compatibility	For existing Raritan customers, select Paragon I and Paragon II CIMs as well as the Dominion KX I DCIMs are supported by the KX II. Paragon and Dominion customers wanting to upgrade to KX II can reuse many of their CIMs, reducing the cost of migration.
SNMP Management and Syslog	The Dominion KX II SNMP agent distributes SNMP traps for important system events to SNMP management systems, including the new CommandCenter NOC service management appliances. SNMP traps are fully configurable by the administrator. Syslog also available.
Firmware Upgrade over Ethernet	Dominion KX II firmware upgrades can be downloaded directly from the Raritan Web site and upgrades can be performed via the network.
KX II DCIM Firmware Upgrades	The Dominion KX II D2CIMs can be firmware upgraded from the KX II appliance to support new features and improvements. This includes the new KX II USB CIM supporting virtual media and Absolute Mouse Synchronization and the new KX II Power CIM.