Paragon® II

A Flexible, Secure Cat5 Analog KVM Solution with the Industry's Best Video Performance

Paragon II

Paragon II is a stackable, Cat5 KVM switch that allows IT staff to manage thousands of servers.

P2-UMT242
– 2-user
– Up to 42 ports

P2-UMT442
– 4-user
– Up to 42 ports

P2-UMT832M
– 8-user
– Up to 32 ports
– Stacking unit capabilities

P2-UMT1664M
– 16-user
– Up to 64 ports
– Stacking unit capabilities

Higher Video Resolution Over Greater Distances, Non-Blocked Access for up to 64 Users, Optional IP Access, Centralized Management and Smart Card Support

Paragon II is a Cat5 analog KVM solution that provides up to 64 users with secure, non-blocked access and control of data center devices. Its rich suite of management features enables logging and audit trails, systemwide reset from a user station and a single, consolidated view of all connected devices. It can also scale up to thousands of servers to dramatically reduce costs of data center equipment and rack space.

The Industry's Best Video Performance

Paragon II offers the industry's best video quality with resolutions as high as 1920 x 1440 – at distances of up to 1,000 feet (305 meters) – at refresh rates of 60 Hz, and 1600 x 1200 – at distances greater than 1,000 feet (305 meters) – at refresh rates of 60 Hz, 75 Hz and 85 Hz. Paragon II supports automatic skew compensation and widescreen resolutions, such as 1440 x 900.

The Multiple Video feature enables up to 16 user stations to simultaneously receive the video output from multiple servers or servers with multiple video ports. And Video Redirect provides easy redirection of video to any user station within a Paragon II system – a natural fit for NOC displays, video walls, broadcast control rooms and more.

Integrated Smart Card Reader for Enhanced Security

Paragon II supports multifactor authentication access to Windows® and Linux® servers with smart card technology, which strengthens security, contributes to compliance with U.S. Homeland Security HSPD-12 and increases staff productivity by simplifying administrative tasks.

Partnering with SCM Microsystems, a leading supplier of standards-compliant smart card readers, Raritan integrated the SCM reader into our Paragon II Enhanced User Station (model numbers P2-EUST/C and P2-EUST/C-GOV). The Paragon II smart card reader solution supports CAC and PIV cards, and is FIPS 201 approved.

### Audio and Digital Video Support for Media and Broadcast Applications

Paragon II includes a control interface for the NVISION® NV5128 audio/video router from Miranda Technologies – delivering not only audio to Paragon II users, but digital video as well. The control interface is built into Paragon Manager®, which continuously monitors usage of Paragon II, and through the NV5128, "switches" audio and/or digital video to users based on easy mapping that's configured by an administrator.

✕ Raritan®

Know more. Manage smarter.™

A Flexible Modular Architecture

Paragon II offers great flexibility and manageability through access to leading servers, including IBM BladeCenter®, power strips and other IT devices. Also, optional KVM-over-IP access is available for easy remote access.

▶ **Main Switching Unit (M model):** A secure, intelligent, non-blocked control unit that connects users to servers. Its stackable architecture provides the industry's highest port density, making it ideal for large data centers with densely packed racks.

▶ **Stacking Unit (S model):** A unique, cost-effective, space-saving expansion unit that easily brings each switch up to 128 non-blocked server ports with less cable than cascading. Stacking units reduce the clutter of multiple cables between tiers, as well as save rack space and HVAC costs.

▶ **Enhanced User Station (P2-EUST and P2-EUST/C):** The P2-EUST connects the user's keyboard, video and mouse to the main switching unit. Its On-Screen User Interface (OSUI) provides easy, intuitive access to attached servers. In addition to all of the features available in the Enhanced User Station, the P2-EUST/C offers the added security of an integrated smart card reader, a FIPS 201– approved solution that supports the use of CAC and PIV cards.

▶ **Easy IP Access:** Raritan offers two convenient solutions for accessing Paragon II over an IP network. First, the P2-USTIP uses the familiar Raritan Remote Client GUI and combines user station and IP gateway functionality into a single device with a slim form factor. It also provides power on/off/recycle capabilities for remote power strips. The P2-USTIP supports 128-bit SSL encryption and local authentication through the Paragon II. The Dominion® KX II may also be used for IP access to Paragon II. This option is perfect when the access solution requires both analog and IP access, or when support of an authentication/authorization platform is needed. CommandCenter® Secure Gateway may also be used when accessing Paragon II through the Dominion KX II.

▶ **User Expansion (P2-HUBPAC):** Now field-upgradeable, it connects up to four Paragon II KVM switches, giving up to 64 users non-blocked access to target devices.

▶ **Computer Interface Module (CIM):** CIMs connect Cat5/5e/6 cabling from the switch to the KVM ports of the target server (including IBM BladeCenter), providing "keep-alive" keyboard/mouse emulation to the server.

▶ **Daisy Chain Capabilities (P2ZCIM):** You can easily connect up to 42 PS/2, Sun™ and/or USB servers on a single Cat5 cable chain, using only one server port on a Paragon II unit. It can extend distances of up to 1,000 feet (305 meters) from the main switching unit to the last P2ZCIM in the chain.
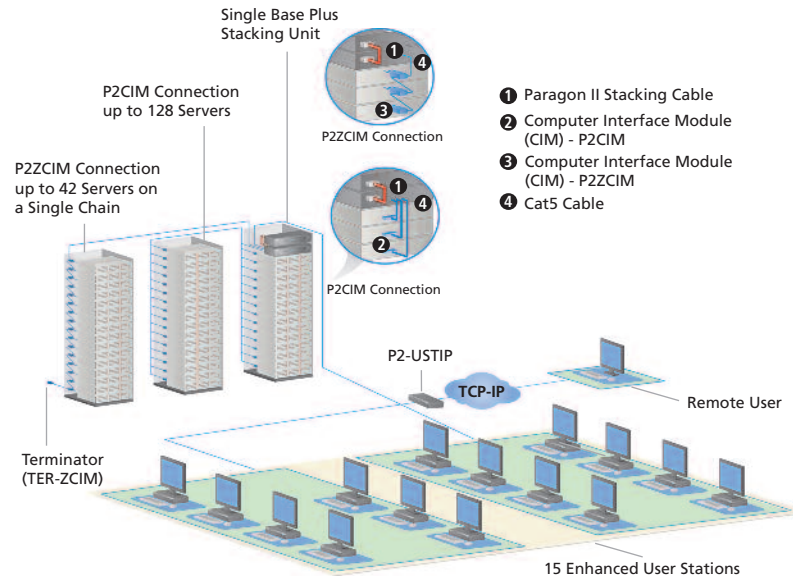
Note: This is a sample configuration design; Raritan products support a variety of configurations and solution sizes.

Paragon II – Engineered for the Enterprise

Paragon II is a proven, stackable switch, the perfect infrastructure component for all high-density server environments, including:

▶ Corporate data centers

▶ Server farms

▶ Co-location facilities

- ▶ Web-hosting facilities
- ▶ Hardware and software testing labs
- ▶ Broadcast production facilities (via NVISION NV5128 and Deko® FastAction Keyboard support)

Designed to Be Scalable

- ▶ Add, relocate and hot-swap components without disruption as your data center needs change
- ▶ Add stacking units for up to 128 server ports
- ▶ Easily connect up to 42 Sun, USB and/or PS/2 servers on a single Cat5 cable chain, using P2ZCIMs

Engineered to Be Flexible

- ▶ Streamlines management capabilities with event logging and audit trails
- ▶ Distributed architecture lets you physically position servers and users where desired
- ▶ Multiple video enables multiple user stations to simultaneously view the video outputs of servers with multiple video ports (two or four)
- ▶ Allows seamless access to all operating systems, platforms and connections: Linux, Windows NT®, UNIX®, Novell®, Sun, IBM RS/6000® and pSeries®, IBM BladeCenter, HP 9000, Alpha™, SGI®, ASCII/serial, USB or PS/2

- ▶ In addition to standard mice and keyboards, Paragon II also supports the Kensington Expert Mouse®, primarily used in Mac® environments, and Cortron® keyboards, designed for use in rugged, harsh environments

Paragon Manager Software for Easier Administration

- ▶ Provides a single, consolidated view of all connected devices
- ▶ Add, remove or edit users
- ▶ Automatically detect power strips and associate power outlets with attached devices
- ▶ Perform systemwide firmware upgrades
- ▶ Log and audit system events

Integrated Power Management for Convenience

- ▶ Power on, power off or recycle power to servers and other attached devices
- ▶ Define security levels for individual users on a per-outlet basis
- ▶ Automatically displays power strips and Paragon II targets on the connected ports

Paragon II – A Part of Your Centrally Controlled Enterprise
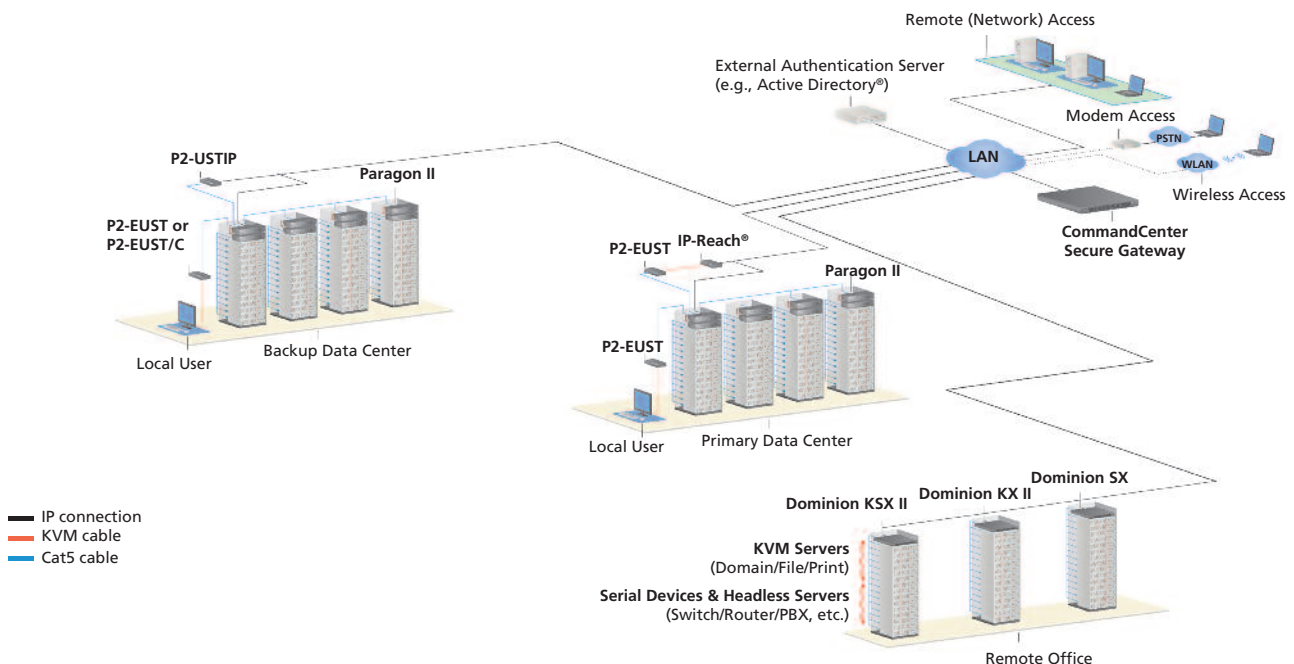
Note: This is a sample configuration design; Raritan products support a variety of configurations and solution sizes.

Specifications

P2-UMT832M   P2-UMT832S

Paragon II Main Switching Units	Description	Dimensions (WxDxH)	Weight	Power
P2-UMT1664M	16 users x 64 server ports, expansion slot, stacking port, network port	17.32" x 11.41" x 3.5"; 440 x 290 x 89mm	12.52 lbs; 5.68 kg	100V/240V 50/60Hz 0.6A
P2-UMT832M	8 users x 32 server ports, expansion slot, stacking port, network port	17.32" x 11.41" x 1.75"; 440 x 290 x 44mm	9.83 lbs; 4.46 kg	100V/240V 50/60Hz 0.6A
P2-UMT442	4 users x 42 server ports, expansion slot, network port	17.32" x 11.41" x 1.75"; 440 x 290 x 44mm	10.13 lbs; 4.59 kg	100V/240V 50/60Hz 0.6A
P2-UMT242	2 users x 42 server ports, network port	17.32" x 11.41" x 1.75"; 440 x 290 x 44mm	10.03 lbs; 4.54 kg	100V/240V 50/60Hz 0.6A

Paragon II Stacking Units	Description	Dimensions (WxDxH)	Weight	Power
P2-UMT1664S	64 expansion server ports for stacking with P2-UMT1664M unit	17.32" x 11.41" x 3.5"; 290 x 440 x 89mm	11.99 lbs; 5.44 kg	100V/240V 50/60Hz 0.6A
P2-UMT832S	32 expansion server ports for stacking with P2-UMT832M unit	17.32" x 11.41" x 1.75"; 290 x 440 x 44mm	8.99 lbs; 4.08 kg	100V/240V 50/60Hz 0.6A

P2-EUST   P2-EUST/C (P2-EUST/C-GOV)   P2-USTIP1

Paragon II User Stations	Description	Dimensions (WxDxH)	Weight	Power
P2-EUST	Analog access point that provides enhanced video for PS/2, USB and Sun consoles	11.4" x 10.62" x 1.75"; 290 x 270 x 44mm	4.3 lbs; 1.9 kg	100V/240V 50/60Hz 0.6A
P2-EUST/C (P2-EUST/C-GOV)	Analog access point that provides enhanced video for PS/2, USB and Sun consoles: includes integrated smart card reader (FIPS 201 approved)	11.4" x 10.62" x 1.75"; 290 x 270 x 44mm	4.8 lbs; 2.2 kg	100V/240V 50/60Hz 0.6A
P2-USTIP1	Remote digital access point for 1 KVM/IP user	17.2" x 11.46" x 1.72"; 440 x 291 x 44mm	8.05 lbs; 3.65 kg	115V/230V 50/60Hz 0.3A
P2-USTIP2	Remote digital access point for 2 KVM/IP users	17.2" x 11.46" x 1.72"; 440 x 291 x 44mm	8.16 lbs; 3.70 kg	115V/230V 50/60Hz 0.6A

Paragon II CIMs	Description	Paragon II CIMs	Description
P2CIM-APS2	CIM for PS/2 provides automatic skew compensation with P2-EUST	P2CIM-AUSB-B	USB CIM for use with IBM BladeCenter; supports automatic skew compensation
P2CIM-ASUN	CIM for Sun provides automatic skew compensation with P2-EUST	P2CIM-AUSB-C (P2CIM-AUSB-C-GOV)	USB CIM for use with smart card–enabled servers; supports automatic skew compensation
P2CIM-AUSB	CIM for USB/Sun USB provides automatic skew compensation with P2-EUST	P2ZCIM-PS2	ZCIM for PS/2
		P2ZCIM-SUN	ZCIM for Sun
P2CIM-AUSBDUAL	USB CIM, provides 2 separate channel ports and supports automatic skew compensation with P2-EUST	P2ZCIM-USB	ZCIM for USB. Features a toggle switch to allow use with both Sun and non-Sun USB computers
P2CIM-APS2DUAL	CIM for PS/2 provides 2 separate channel ports and supports automatic skew compensation with P2-EUST	P2CIM-PWR	CIM for remote power control
P2CIM-APS2-B	PS/2 CIM for use with IBM BladeCenter; supports automatic skew compensation	P2CIM-SER	CIM for serial (ASCII) devices
		TER-ZCIM	RJ45 Terminator

Warranty	Two years with advanced replacement*

Ready to learn more about Paragon II?
Call 1.800.724.8090 or visit www.raritan.com/Cat5-KVM today

Raritan is a leading provider of secure IT infrastructure management solutions. We offer IT and facility directors, managers and administrators the control they need to increase power management efficiency, improve data center productivity and enhance branch office operations. In over 50,000 locations worldwide, our integrated in-band and out-of-band products help companies monitor and manage their energy, servers and other IT devices. Our intelligent PDUs, combined with energy management software and environmental sensors, offer remote power control and monitoring at the rack and device level, empowering data center owners with information to improve uptime and capacity planning, while efficiently utilizing energy to save power and money. And our access solutions, including KVM, serial and centralized management devices, offer unprecedented control of servers to maintain mission-critical environments. Raritan's OEM division provides embedded hardware and firmware for server and client management, including intelligent power management, KVM over IP, IPMI and other industry standards-based management applications.

*To qualify for advanced replacement under the standard warranty, you must register the product at http://Raritan.com/standard_warranty. Specifications are subject to change without notice.