



# DATA CENTER TECHNOLOGY SOLUTIONS

### **POWER**

Intelligent PDUs Rack Sensors Transfer Switches Inline Meters

# **ACCESS & CONTROL**

KVM Switches Serial Consoles AV Distribution Extenders

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## WE'RE ALL ABOUT INNOVATION

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The Raritan brand is synonymous with innovation in power management solutions, serial consoles, and KVM-over-IP switching technology.

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In over 76 countries worldwide, Raritan's award-winning solutions increase energy efficiency, improve reliability, and raise productivity.

Visit www.raritan.eu or call +31 (0)10 284 40 40.



Ralf Ploenes VP Sales, EMEA

# LOOKING FORWARD

Welcome to the world of Raritan solutions. You are about to discover one of the most innovative portfolios of data center products from a leading technology provider. One that is designed by a team passionate about technology and solving the challenges our customers face in helping ensure 24/7 uptime of their mission-critical environments.

Never before has the quality and robustness of data center technology been more important. Our customers live in a world of increasingly volatile economic and market conditions. A moment's downtime will impact brand, reputation, competiveness and bottom line. This is why it's our mission to maximize uptime, increase efficiency, and raise productivity.

Raritan, a brand of legrand, has more than 30 years of data center heritage so it is a space we know well. Each of our solutions is designed and tested by deployingthisknowledge and expertise. An integral part of our DNA is to design, build and deliver solutions that not only meet our customers' needs today but future-proof that investment for many years to come. We feel privileged to have so many delighted customers that rely daily on our solutions installed in the tens of thousands IT environments worldwide. Not only are we today the leading KVM vendor but also proudly hold a third position as a global PDU manufacturer since launching the first outlet metered, outlet switched intelligent PDU in 2007.

Inside this catalog you will find best-in-class solutions across many technological areas. So whether you are interested in secure, remote access to your data center or colocation facility, power, energy, environmental monitoring and management, look no further than Raritan.

But don't just take our word for it: learn more and watch the various customer testimonial videos on our website, or simply contact us for an appointment to see the Raritan products live in action.

We hope you'll experience this catalog as a source of inspiration for your next data center project. Enjoy browsing!

# **INNOVATION MATTERS**

Raritan remains commited to quality and innovative technology which help increase data center efficiency, reliability, and raise productivity.

# >60,000 DATA CENTERS

Raritan's award-winning KVM, serial console and intelligent PDU products are in use at over 60,000 data centers worldwide.



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# PROFILE

Raritan, a brand of legrand, is a proven innovator of power management solutions, serial consoles, and KVM-over-IP switching technology for data centers of all sizes.

In over 50,000 locations worldwide, Raritan's award-winning solutions increase energy efficiency, improve reliability, and raise productivity.

Raritan was founded in 1985 in Somerset, NJ (USA) and acquired by Legrand in 2015.

## GLOBAL

Raritan is represented in 76 countries with a partner network spanning the globe.

Users can rely on best-in-class hardware and software solutions supported by a team of highly skilled individuals, passionate to answer and resolve your technical product related questions.

VADs, VARs and System Integrators interested in selling Raritan products should contact marketing.europe@raritan.com.

When partnering with us, you'll build a stream of revenue from an array of satisfied customers. In short, we help you to grow your business by solving your client's biggest data center management challenges. time, optimize efficiency and allow for strategic decision-making based on reliable data points.

Raritan is always looking to push technology further and innovation is at our core. With 47 patents granted and 30 more applications pending, Raritan is making sure you always have the latest and future-proof technology.

## **CUSTOMER FOCUSED**

At Raritan we believe customers should always come first, whether it's in designing a new product or when we get a support question, Raritan makes sure the customer gets an effortless experience.

## TRUSTED

When you buy a Raritan product you can be sure you are getting a product that's been manufactured with great care and to the highest standard.

Intelligent PDU Technology



KVM & Serial Technology



# INNOVATION

Our solutions help IT professionals gain more insight into data center operations and manage smarter in more than one way. We help maximize up-

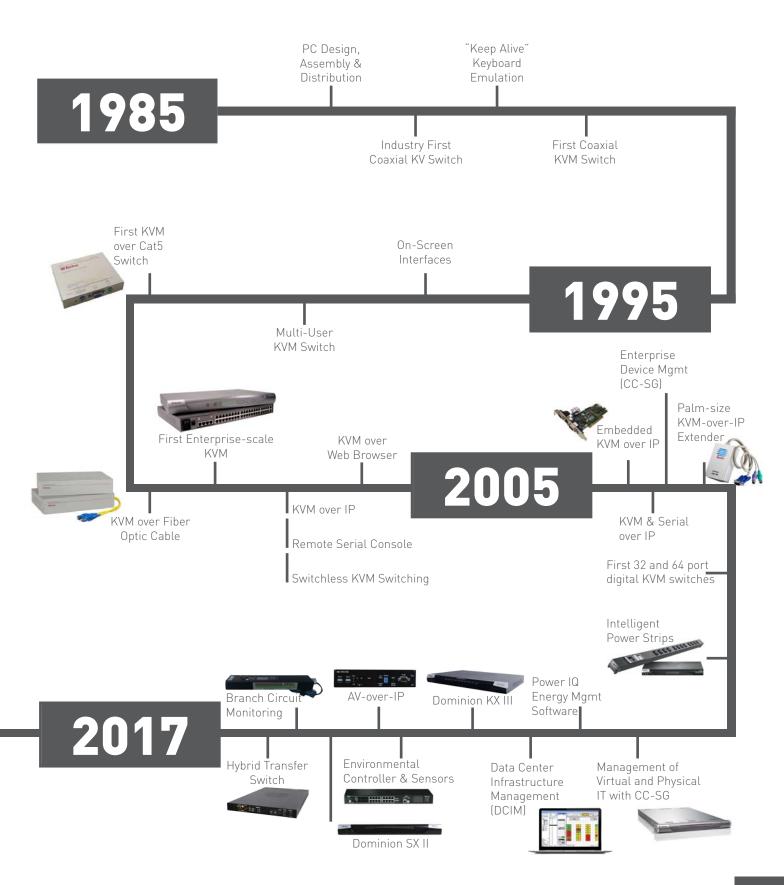


Formulated by the EU's Joint Research Centre, the Code is a measured response to the energy challenges the EU faces. t's aim is to encourage companies with data centers to reduce energy consumption while ensuring business objectives continue to be met.

As an endorser, Raritan have pledged to implement the Code's ethos through devising products and services that help organizations to bring their data centers into line with its best practice recommendations.



# **HISTORY OF INNOVATION**



# **GLOBAL NETWORK**

Headquartered in Somerset (NJ) USA, and with offices in America, Europe, and Asia. Raritan is represented in 76 countries with a partner network spanning the globe. Raritan is a brand of Legrand.



## **LOCAL RARITAN OFFICES**

**[America]** North America Canada **[Europe]** Germany France United Kingdom Netherlands **[Asia]** India China Taiwan Japan Singapore

**[Oceania]** Australia



# **EMEA PARTNER NETWORK**

Austria Belgium Croatia Cyprus Czech Republic Denmark Estonia

- Egypt Finland France Germany Greece Hungary Iceland
- Ireland Italy Latvia Luxembourg Kuwait Malta Netherlands
- Norway Poland Portugal Romania Russia Serbia Slovenia
- South Africa Spain Sweden Turkey United Arab Emirates United Kingdom

# **POWER MANAGEMENT**

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# **PX® - INTELLIGENT PDUS**

Intelligent rack power distribution units (iPDUs) that include outlet switched, outlet metered, PDU metered, and more. Available in 800+ single and three phase models.

Page 12



# **INLINE METERS (PX-3000 SERIES)**

Intelligent inline power meters that easily add power, energy and rack environment data collection capabilities to stand-alone IT equipment.

Page 13



# **BRANCH CIRCUIT MONITORS** The BCM series of intelligent branch circuit meters provide power and energy data on branch circuits and mains in an electrical service entrance or a remote power panel.

Page 14



# **TRANSFER SWITCHES**

The hybrid rack transfer switches use electromechanical relays and silicon-controlled rectifiers (SCRs) to transfer power loads between two sources in case of power outages.



# SMART RACK CONTROLLER (EMX)

EMX is a central access point for all of our environmental sensors such as temperature and humidity providing sensor readings and asset management.

# \*\* RARITAN PROVIDES CUSTOMERS THE BEST SOLUTION FOR THEIR CHALLENGES,,





# **PX<sup>®</sup> - INTELLIGENT PDUS**

The Raritan PX family of high-quality, intelligent rack power distribution units (iPDUs) offers real-time remote power monitoring of current (Amps), voltage (Volts), power (kVA, kW) and energy consumption (kWh) with +/- 1% billing-grade accuracy, even at the outlet level.

The PX series offers hundreds of models to meet all your data center applications, including models with remote outlet switching, individual outlet metering, high-power for blade servers and high-density applications, and 400V power distribution.

	SWITCHING	OUTLET METERING	INLET METERING	CIRCUIT BREAKER METERING	Available in 800+ single and three phase models. Find them all on
PX-1000					www.findmypdu.com
PX-2000				1.1	
PX-4000					
PX-5000		-			



### **ENVIRONMENTAL SENSORS**

Optional plug-and-play sensors for temperature, humidity, airflow, differential air pressure, and water leaks alert you to potential threats as soon as certain thresholds have been reached. Simply connect to a dedicated port on your Raritan iPDU, inline meter, environmental controller or transfer switch and you're all set!

CONSOLE / MODEM

Confidently raise ambient temperatures and adjust fan speed in CRAHs and CRACs to increase your energy savings and get the most out of your cooling systems. Find out more about sensors on page 16.



#### ENERGY EFFICIENT LATCHING RELAYS

Bistable latching relays only require power to switch from one state to another so PDUs consume 67% less energy, produce less heat. They can be configured to return to pre-outage state instantly, or leverage patent-pending outlet sequencing technology that minimizes inrush current.



ETHERN

### SECURELOCK™ POWER CORDS

IEC outlets often fail to securely hold plug due to vibration or human error. Raritan's intelligent rack PDUs are equipped with SecureLock outlets that lock when using SecureLock power cords to prevent accidental disconnects.



Raritan's intelligent PDUs are available in multiple colors that help reduce errors, and make it easier to identify power feeds, and troubleshoot, thereby lowering the risk and duration of unplanned downtime.

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#### **RESIDUAL CURRENT MONITORING OPTION**

Reduce the risk of electric shock by measuring leak currents within your racks vith PDU's. A too high residual current threshold will generate a system alert. mmediate preventive action should keep technicians safe from harm while vorking in the racks.

# **INLINE METERS**

ESET

The PX-3000 Series Inline Power Meters simplify management of power usage and environmental conditions in the data center while allowing you to monitor the power on dedicated circuits.

There is no need to remove or re-cable IT equipment. Just wire the inline meter into existing circuits and get real-time remote power monitoring, including current (amps), voltage (Volts), power (kVA, kW) and energy consumption (kWh) to +/– 1% accuracy. Plus they're sensor ready to support all Raritan environmental sensors.



# **BRANCH CIRCUIT MONITORS**



Raritan's intelligent Branch Circuit Monitoring (BCM) system allows you to fully utilize your power infrastructure and manage capacity as your data center grows and changes. Whether you are retrofitting an existing facility, or planning for growth or new construction, Raritan's BCM system can help you reduce energy costs, track power usage, and prevent downtime. Easily add metering where it never existed before.

This easy-to-deploy modular system, enables real-time views of electrical capacity and power usage on branch circuits, and mains, in an electrical service entrance or a remote power panel. It sends threshold alerts for power and environmental conditions, thereby helping to prevent downtime. The data can also support energy efficiency and customer charge-back initiatives.





#### CURRENT TRANSFORMERS (CTS)

# FEATURES AND BENEFITS

- Meters Floor PDU, RPPs, Panelboards, and Busways
- One controller supports up to 70 power meters
- Current Transformers (CTs) connect to live circuits
- Auto-correct metering adjusts for CT orientation on wires
- Real-time configurator
- USB ports for configuration, Wi-Fi networking, and tablet display
- Several enclosure options
- Collects data on: A, V, kW, kVA, power factor, and kWh
- Protocols include TCP/IP, Modbus and SNMP

	DESCRIPTION
BCM2-DIN-KIT-Y01	Power Panel Distribution Board Meter: Input: 3 Phase 250A, Output: 24x Single Phase Branch Circuits INCLUDING Controller 1x PMC-1001 (Rack/Wall Mount Power Meter Controller) 1x PMM-1000 (3PH, 480V AC DIN Rail Power Meter Module) 1x PMB-1960 (96 Port Power Meter Branch) 1x BCM2-250A-CT-4PK (4x 250A Current Transformers/~0.5% Accuracy/333mV/24""/610mm Lead) 1x BCM2-BCT-4PK (4x 250A Current Transformers/~0.5% Accuracy/333mV/24""/610mm Lead) 1x BCM2-60A-CT-12PK (12x 60A Current Transformers/~0.5% Accuracy/333mV/24""/610mm Lead) 1x BCM2-BCTcable-3M-1 1x BCM2-BCTcable-3M-2 1x BCM2-BCTcable-3M-3 1x BCM2-BCTcable-3M-3
BCM2-DIN48-KIT-Y01	Power Panel Distribution Board Meter: Input: 3 Phase 250A, Output: 48x Single Phase Branch Circuits INCLUDING Controller 1x PMC-1001 [Rack/Wall Mount Power Meter Controller] 1x PMM-1000 (3PH, 480V AC DIN Rail Power Meter Module) 1x PMB-1960 (96 Port Power Meter Branch) 1x BCM2-250A-CT-4PK (4x 250A Current Transformers/~0.5% Accuracy/333mV/24""/610mm Lead) 1x BCM2-MCTcable-3M [Mains Circuit Cable for 5x CTs] 4x BCM2-60A-CT-12PK [12x 60A Current Transformers/~0.5% Accuracy/333mV/24""/610mm Lead] 1x BCM2-BCTcable-3M-1 1x BCM2-BCTcable-3M-2 1x BCM2-BCTcable-3M-3 1x BCM2-BCTcable-3M-4



# **TRANSFER SWITCHES**



Raritan's hybrid rack transfer switch prevents downtime in racks with single power supply devices. It provides power metering at the inlet, outlet, and branch circuit level. It also offers outlet-level switching for better remote power control.

This switch cleverly uses both electromechanical relays and silicon-controlled rectifiers (SCRs) to maximize the positive and minimize the negative characteristics of both automatic and static transfer switches (ATS/STS).



# FEATURES AND BENEFITS

- Fast transfer: Load transfer times 4 8ms
- Reliable transfer between sources regardless of phase
- Over-sized relays (rated 48A) and SCRs (rated 70A)
- Eliminates electrical arcing that leads to relay failures
- 3.3mm vs. typical 0.6mm air gap to prevent arcing due to surges
- Inlet surge protection and field replaceable, fast-blow fuses for short circuit protection
- Threshold alerting and status updates via email and syslog, SNMP V1/2 and 3
- Logs transfer times for reporting
- Support for up to 32 plug-and-play sensors
- USB support i.e. Wi-Fi, camera, tablet, and cascading

	CHASSIS	INPUT VOLTAGE	PLUG TYPE	OUTPUT VOLTAGE	OUTLET TYPE	CURRENT	CIRCUIT BREAKER
PX3TS-1875CR	1U	200-240	(2) IEC C-20 (CE)	200-240	8x C13 1x C19	16	0
PX3TS-1875R	1U	200-240	(2) IEC 60309 16A	200-240	8x C13 1x C19	16	0
PX3TS-1469R	2U	200-240	(2) IEC 60309 32A	200-240	16x C13 4x C19	32	2x 16A 1-Pole
PX3TS- 5191CR	1U	200-240	(2) IEC C-20 (CE)	200-240	7x C13 1x C19	16	0

# **EMX - SMART RACK CONTROLLER**



EMX is a central connection point for all of Raritan's environmental sensors. The EMX smart rack controller offers up to eight sensor ports, eight feature ports for Raritan's dynamic asset-tracking solution (AMS) and eight RS-485 ports, all in a 1U form factor.

This innovative rack monitoring solution helps data center and facilities managers to ensure uptime by monitoring racks for possible hot spots, save on cooling costs by confidently raising data center temperatures and make strategic decisions on environmental design and modifications.

2 contact closure, LCD display

MODELS AND DESCRIPTION

EMX2-111

EMX2-888

# **FFATURES**

- USB Webcam Support
- Supports up to 128 sensors
- Wired or WiFi Network Ready
- Web Browser Accessible
- Receive Advanced Alerts

# **ENVIRONMENTAL SENSORS**



port, 1 RJ-45 Ethernet port, 1 DB-9M console/modem, LCD display

USB-B port, 1 RJ-45 Ethernet port, 1 DB-9M console/modem,



Smart rack controller with 1 RJ-12 sensor port, 1 RJ-45 feature port for AMS, 1 RJ-45 RS-485 port, 1 USB-A port, 1 USB-B

Smart rack controller with 8 RJ-12 sensor ports, 8 RJ-45 feature ports for AMS, 8 RJ-45 RS-485 ports, 2 USB-A ports, 1

Hot Aisle Temperature Can be placed at either the front or rear of the rack to monitor cool air entering and hot air being expelled, and ensure proper



Data Center

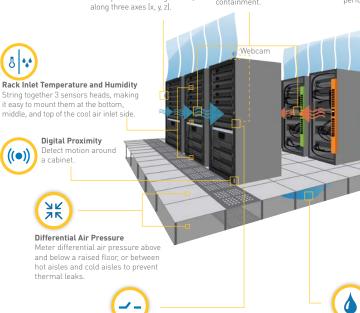
Containment

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Raritan environmental solutions feature sensors for monitoring temperature, humidity, airflow, air pressure, water/leaks, contact closures, digital proximity, and acceleration

The sensors are deployed as valuable plugand-play options to connect to Raritan's intelligent rack PDUs, EMX controllers, inline meters, transfer switches, and branch circuit monitors

Environment sensors make it easy to identify hot spots, cool equipment optimally, prevent downtime, and maintain facility security.



Contact Closure The dual contact closure is used with 3rd party sensors such as smoke detectors magnetic door locks, or to trigger webcams whenever a cabinet door is opened.







Power IQ enables data center and facility managers to closely monitor and efficiently utilize existing data center power infrastructures. Data center health maps, power analytics, cooling charts, and reports provide the tools to alert you to potential trouble and understand real-time power load, trends, and capacity at all levels of the power infrastructure.

Environment data collected by sensors is instantly sent to Raritan's Power IQ DCIM monitoring software which allows you to confidently raise ambient temperatures and adjust fan speed in CRACs to increase your energy savings and get the most out of your cooling systems.

Power IQ, initially developed by Raritan and now offered to you by Sunbird Software Inc., fully integrates with Raritan power management products.

# POWER IQ ALLOWS YOU TO:

- See hot spots at-a-glance
- Know when to increase/decrease temperature set points
- Know how much to humidify
- Easily manage to ASHRAE standard thermal envelopes
- Simplify how you manage airside economization
- Customize and add your own thermal envelopes



A real-time interactive data center health map warns

of issues such as hot spot formation, SLA violations over charges, and loss of redundancy.

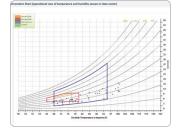
Data Center Health Map



#### Power Capacity and PUE Gauge

See real-time PUE and trends, and your current power capacity utilization at any level in your data center or lab (PDU, rack, row, busway, room, etc.).

"BY GRAPHING ENERGY USAGE AND TRENDS AND TRACKING OUR CARBON FOOTPRINT, RARITAN'S ENERGY MANAGEMENT SOLUTION IS HELPING US IDENTIFY AREAS WHERE WE CAN CONSERVE. ALLOWING US TO MONITOR IN REAL-TIME AND REDUCE COST."





#### Cooling Chart

Ensure compliance with manufacturers' and industry accepted recommendations and project cost savings achieved by increasing temperature set point. Power and Energy Analytics

Intuitively create charts to visualize active power by rack, carbon footprint by building, customer billback, total energy consumption, and any other metric you can think of.

Find out more on sunbirddcim.com

# **CUSTOMER EXPERIENCE**

Soaring energy prices, greater competition in the marketplace, and global concerns over climate change are forcing companies to reconsider how they utilize power in the most valuable and energy intensive resource they own – the data center. It's why data centers are now so focused on cutting operational costs by improving efficiencies, and making optimal use of energy, space, and cooling.

Not surprisingly, many of the major strategies being employed to address these challenges depend on capabilities that were not present in the simple commodity power strips of a few years ago.

# REAL-TIME ENERGY OPTIMIZATION AND BEST PRACTICES IN A MISSION-CRITICAL DATA CENTER

### CUSTOMER

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Founded in 1995, eBay connects a diverse and passionate community of individual buyers and sellers, as well as small businesses. With more than 90 million active users globally, eBay is the world's largest online marketplace, where practically anyone can buy and sell practically anything.

### CHALLENGES

With compute loads – and operating costs – on the rise, eBay created and began executing a four-year data center plan with an ambitious goal:

- To cut power costs in half
- To double compute performance
- To gain greater operational agility and increased reliability

### SOLUTIONS

Power Management PX intelligent PDUs

# \*\* PX INTELLIGENT PDUs CAN PROVIDE ME WITH THE PRECISION REQUIRED TO CALCULATE MY TRUE OPERATIONAL COSTS FOR EVERY SERVER, DOWN TO THE LAST PENNY,,

### RESULTS

eBay developed a model for its data centers that makes their IT operations both highly reliable and 50% less expensive to operate than the data centers they are decommissioning. In addition to minimizing faults and lowering operating costs, eBay's South Jordan, Utah facility has achieved the U.S. Green Building Council's Leadership in Energy & Environmental Design (LEED) Gold ranking. Just as important as the LEED Gold efficiency ranking and Tier IV reliability is the flexibility designed into the eBay data center.

# **POWER PRODUCT OVERVIEW**

Since offering intelligent power distribution units in 2007, Raritan has now achieved a 3rd position worldwide and is still growing fast with an ever expanding portfolio of power products. Below you can find an overview of our current power management portfolio.

#### 

#### **PX INTELLIGENT PDUS**

Our intelligent rack power distribution units (iPDUs) include outlet switched, outlet metered, unit metered, and more. Available in single and three phase models.



#### **PXE**

PXE is a family of Intelligent Rack PDU's for the budget conscious buyer looking for an entry level iPDU solution to gain more insight.



#### **PX-3000 INLINE METERS** Intelligent inline power meters that easily add power, energy and rack environmental data collection capabilities to stand-alone IT equipment.

#### 

#### **TRANSFER SWITCHES**

The hybrid rack transfer switches use electromechanical relays and siliconcontrolled rectifiers (SCRs) to transfer a load between two sources.



#### **POWER IQ**<sup>®</sup>

Power IQ powered by Sunbird Software Inc. enables data center managers to closely monitor and efficiently utilize their existing data center power infrastructure.



### EMX SMART RACK CONTROLLERS

The EMX smart rack controller is a central access point for all of Raritan's environmental sensors such as temperature and humidity, and in conjunction with Sunbird's data center infrastructure management solution (DCIM) provides sensor readings and asset management.



**BRANCH CIRCUIT MONITORS** The BCM series of intelligent branch circuit meters provide power and energy data on branch circuits and mains in an electrical service entrance or a remote power panel.



SECURELOCK POWER CORDS Prevent accidental power cord disconnects with SecureLock - an integrated locking system of power cords and rack PDU outlets which secures power cords to rack PDUs.



#### **ENVIRONMENTAL SENSORS**

Environment sensors such as temperature, humidity, airflow, air pressure, water, and contact closure help data center managers identify hot spots, efficiently and optimally cool equipment, prevent costly downtime, and maintain data center security.

# **ACCESS MANAGEMENT**



# **KVM-OVER-IP SWITCHES (DOMINION KX III)**

Enterprise-class, secure KVM-over-IP switch that provides BIOS-level remote management of up to 64 multi-platform servers and serial-based devices in a single switch.

Page 22



# CENTRALIZED ACCESS & POWER (COMMANDCENTER SECURE GATEWAY)

An easy to deploy centralized management solution that provides a single pane of glass to all servers, PDUs, storage, and network equipment.

Page 24

DSX2-32



# ANALOG KVM SWITCHES (PARAGON II)

Enterprise, Cat5 analog KVM switch for high performance video switching in broadcast and secure applications in government and military. Supports up to 64 users and thousands of servers.

Page 25

# SERIAL CONSOLES (DOMINION SX II)

Next-generation serial console server / terminal providing serial-over-IP access and control of devices -- anytime, anywhere. It's the most powerful, secure, reliable, easy-to-use console server on the market. Page 26

# **KVM & SERIAL PRODUCT OVERVIEW**

Award-winning KVM-over-IP and analog KVM switches provide secure BIOS-level remote access of servers and other network devices in your server room, labs, branch offices, up to the largest enterprise data centers.

# **TECHNOLOGY BORN** OUT OF PASSION , ,



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# DOMINION<sup>®</sup> KX III

The Dominion KX III is Raritan's flagship enterprise-class KVM-over IP switch. With industry leading video performance, security, and enhanced reliability, the Dominion KX III outperforms the competition. With standard features such as DVI /HDMI / DisplayPort digital video, VGA analog video, audio, virtual media, smart card/CAC, and mobile access, the Dominion KX III is suitable for both general computer and dynamic broadcast applications.

It's ideal for Server Rooms, Test Labs, and the largest Enterprise Data Centers. KX III offers high performance webbased remote management of servers, storage, and network devices and virtually any application. Deploy individually, or centralize with Raritan's CommandCenter Secure Gateway (see page 24).

REMOTE USERS OVER NETWORK	64 PORTS	32 PORTS	16 PORTS	8 PORTS
8	DKX3-864	DKX3-832		DKX3-808
4	DKX3-464	DKX3-432	DKX3-416	
2		DKX3-232	DKX3-216	
1		DKX3-132	DKX3-116	DKX3-108



### DOMINION® KX III USER STATION

Standalone appliance for high performance IP access to servers connected to Dominion® KXIII switches. Deploy it using standard Cat5 cabling and Ethernet/ IP technology. It's perfect for broadcast, labs, studios, control rooms, offices, and data centers.

### AMAZING DIGITAL VIDEO & AUDIO PERFORMANCE

80 frames-per-second, high definition video support over-IP. The 1920x1200, high definition, digital video performance supports broadcast and other dynamic, video-intensive applications.

A DVI digital local port provides fast, at-the-rack access.



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### MOUSE IN SYNC

Raritan KVM switches come with the unique Absolute Mouse Synchronization<sup>™</sup>. It provides perfect mouse synchronization without changing server mouse setting.



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# REMOTE BIOS-LEVEL ACCESS & CONTROL

Dominion KX III has the industry's highest performing and most flexible KVM-over-IP technology. Users can access Dominion KX III from LAN, WAN, Internet, mobile & dial-up, allowing admins BIOS-level access to troubleshoot, reconfigure, reboot and power cycle servers remotely.

### **MILITARY GRADE SECURITY**

With Raritan's Dominion KX III, you can meet government and military security mandates, including: AES & FIPS 140-2 encryption, Common Access Card (CAC) authentication, and IPv6 networking.

#### REDUNDANCY FOR RELIABILITY

For increased reliability and redundancy, all Dominion KX III models have dual power supplies and LAN ports, with automatic failover.

### VIRTUAL MEDIA OVER IP

Each Dominion KX III comes equipped with virtual media to enable remote tasks, such as software installation, remote booting and diagnostics, using the widest variety of media storage (CD, DVD, USB, internal and remote drives, and images).



# **COMPUTER INTERFACE MODULES (CIMS)**

Raritan offers a full line of CIMs to support a variety of platforms and applications

A suite of multiplatform CIMs to connect to VGA, DVI, HMDI and DisplayPort, USB with virtual media, Sun®, Sun USB and serially controlled servers, as well as popular blade server models from: HP®, IBM®, Dell® and Cisco®.



# **COMMANDCENTER® SECURE GATEWAY**



Raritan's CommandCenter Secure Gateway (CC-SG) provides IT and lab organizations with secure and consolidated access and power control of all technology platforms at the application, operating system or BIOS level.

CC-SG's single pane of glass helps simplify remote management and expedite troubleshooting of physical and virtual servers, intelligent PDUs, and serial devices.

Available as hardware, VMware or Hyper-V appliances.



# FEATURES AND BENEFITS

- Single point of access to physical servers (including blade systems and PCs), virtual machines and VMware® infrastructures
- Flexible client options for convenient server access and management of servers and PDUs from an iPhone or iPad
- Centralized authentication, authorization and logging
- Intuitive menus and easy reporting everything from usage and auditing to assets and nodes
- Centralized, role-based, user access policy management
- Robust security features
- High availability and redundancy





# **PARAGON® II**



Paragon II is an enterprise-class Cat5 analog KVM solution that provides up to 64-users with secure, real-time access and control of thousands of servers and serial devices. Its secure KVM switch technology features the industry's best video quality with resolutions as high as 1920 X 1440 at distances of up to 300m (1,000 feet), making it the perfect solution for Government, Broadcast, Production and Post-Production facilities.

Plus, it's ideal for Enterprise Data Centers due to its configuration flexibility and broad compatibility, supporting leading platforms from HP<sup>®</sup>, Dell<sup>®</sup>, IBM<sup>®</sup>, Cisco<sup>®</sup>, and Oracle<sup>®</sup>.



# FEATURES AND BENEFITS

- Smart Card and CAC reader capabilities
- Add stacking units for up to 128 server ports
- Streamlines management capabilities with event logging and audit trails
- Provides a single, consolidated view of all connected devices
- Multiple video enables multiple user stations to simultaneously view the video outputs of servers with multiple video ports (two or four)
- Define security levels for individual users on a server port basis
- Video quality with resolutions as high as 1920 x 1440
- Supports widescreen resolutions

	128 PORTS		128 PORTS 64 PORTS			
USERS	MAIN SWITCH	STACKING UNIT	MAIN SWITCH	STACKING Unit		-
16	P2-UMT1664M	P2-UMT1664S	P2-UMT1664M			
8	P2-UMT832M	P2-UMT832S (3x)	P2-UMT832M	P2-UMT832S		P2-UMT832M
4					P2-UMT442	
2					P2-UMT242	

# DOMINION<sup>®</sup> SX II

The Dominion SX II is Raritan's next-generation Serial Console Server (Terminal Server) that provides IT and network administrators secure IP access and control of serial devices, anytime, anywhere. The new SX II is the most powerful, secure, reliable, easy-to-use serial-over-IP device on the market. SX II provides convenient access to networking devices, servers, PDUs, telecommunications and other serial devices.



### POWERFUL HARDWARE PLATFORM FOR HIGH PERFORMANCE SERIAL ACCESS

- Powerful 1GHz CPU engine
- Flash memory, up to 8 GB, for storage and logging
- Dual power supplies and dual gigabit Ethernet LAN ports, with automatic failover
- 4, 8, 16, 32 and 48 port 1U secure appliances (optional telephone modem)

### SERIAL-OVER-IP ACCESS

Complete CLI access and management via SSH, Telnet and web-browser, with convenient direct port access methods. Two script-based automatic configuration methods (TFTP server and USB stick) are available for fast installation and configuration changes. Scales to thousands of devices with Raritan's CommandCenter Secure Gateway.

### **BROAD SERIAL DEVICE SUPPORT**

Enjoy comprehensive serial device access to a wide range of equipment. Support for operating speeds of 1,200 to 230,400 bps with flexible, per-port serial options.

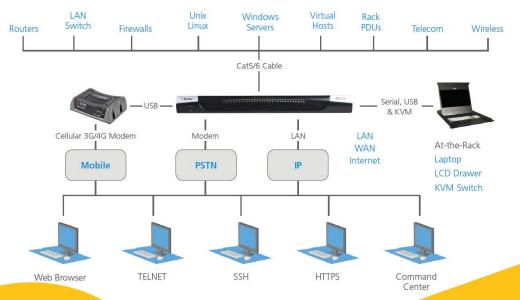


MODELS	DESCRIPTION	
DSX2-4 DSX2-4M	4-port serial console server with dual-power AC and dual gigabit LAN. Serial, USB and KVM local console ports. M in model = internal telephone modem	
DSX2-8 DSX2-8M	8-port serial console server with dual-power AC and dual gigabit LAN. Serial, USB and KVM local console ports. M in model = internal telephone modem	
DSX2-8M-DC	8-port serial console server with dual-power DC and dual gigabit LAN. Serial, USB and KVM local console ports. Internal telephone modem.	
DSX2-16 DSX2-16M	16-port serial console server with dual-power AC and dual gigabit LAN. Serial, USB and KVM local console ports. (M in model = internal telephone modem)	
DSX2-32 DSX2-32M	32-port serial console server with dual-power AC and dual gigabit LAN. Serial, USB and KVM local console ports. (M in model = internal telephone modem)	
DSX2-32M-DC	32-port serial console server with dual-power DC, dual gigabit LAN. Serial, USB and KVM local console ports. Internal telephone modem.	
DSX2-48 DSX2-48M	48-port serial console server with dual-power AC and dual gigabit LAN. Serial, USB and KVM local console ports. (M in model = internal telephone modem)	
DSX2-48M-DC	48-port serial console server with dual-power DC, dual gigabit LAN. Serial, USB and KVM local console ports. Internal telephone modem.	

### DOMINION SX II OFFERS MULTIPLE FORMS OF SERIAL-OVER-IP ACCESS

DSX2-32





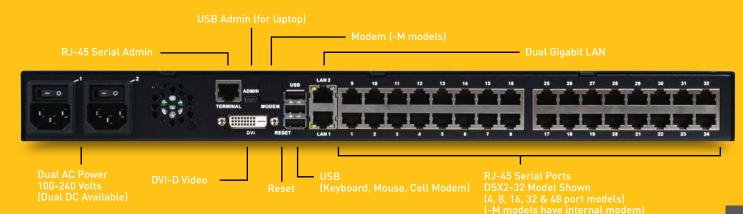
### **AUTOMATIC DTE/DCE SERIAL PORT DETECTION**

For fast installations, the SX II supports straight Cat5 connections to Cisco and other compatible RJ-45 devices, without rollover cables. The SX II can also directly replace the first generation SX with compatible serial device connections.

**MILITARY GRADE SECURITY** Achieve military-grade security levels, including: strong AES and certified FIPS 140-2 encryption, LDAP/RADIUS/Active Directory authentication, and dual stack IPv4 and IPv6 networking.

#### **3G/4G MODEM ACCESS**

The SX II offers an optional internal telephone modem and can connect to an external cellular (3G/4G) modem for emergency access.



# LED-BACKLIT CONSOLE DRAWER

17" and 19" console drawers with LED-backlit LCD displays and DVI-D and VGA inputs, connect to your existing analog or digital KVM switches and provide video, keyboard and touchpad functionality from a single workstation to manage one or multiple racks of servers.

They're perfect for the administration of servers in data centers, server rooms and labs.



T1700-LED

17-inch LED-backlit LCD, 16:9 screen aspect ratio, resolution support up to 1920x1080 @60 Hz.



#### T1900-LED

19-inch LED-backlit LCD, 4:3 screen aspect ratio, resolution support up to 1280x1024 @75 Hz.

# FEATURES AND BENEFITS

- DVI-D and VGA video inputs make it perfect for use with the Dominion® KX III
- LED-backlighting provides up to 20-50% energy savings over current LCD technology
- Accurate image rendering and video performance for sharp, clear pictures
- Supports DDC, DDC2, DDC2B
- USB 2.0 pass thru port to connect external devices e.g. a smart card reader
- Auto power on/off when opening and closing the monitor below a 20 degree angle
- Support for Windows®, Linux® and other operating systems

# ONE WORKSTATION FOR SERVER ACCESS AND CONTROL

When connecting to your existing analog or digital KVM switches, Raritan's LED consoles combine video, keyboard, and touchpad functionality to manage a rack, or multiple racks of servers from a single workstation. They also include built-in USB 2.0 ports for convenient, front-of-the-rack media connections to keyboard, mouse, and smart card readers to manage Raritan KVM switches directly from the racks in which they are installed.



# **CUSTOMER EXPERIENCE**

EPAM Systems is one of the largest developers of (custom) project software and one of the leading players in the field of IT consulting in central and eastern Europe. The company, founded in 1993, employs more than 5,500 specialists and implements projects in more than 30 countries. Company branch offices are located in Russia, Ukraine, Belarus, Kazakhstan, the United States, Hungary, the United Kingdom, Germany, Sweden and Switzerland.



# **PROFESSIONAL SOLUTION FOR IT PROFESSIONALS**

### CUSTOMER

EPAM Systems' primary business activities include: software development, testing, maintenance and support of custom software and business applications; the creation of dedicated software development centers (competence centers), as well as IT consulting.

#### CHALLENGES

The largest service provider in the field of software development needed to ensure prompt, secure and reliable access to servers in the data center with the ability to remotely install software from connected drives and media while users are sitting at their desks.

### SOLUTIONS

Dominion® KX KVM-over-IP switches with virtual media support, security and redundancy features.

# \*\*RARITAN PROVIDED US WITH DEMO ACCESS TO SERVERS CONNECTED TO THEIR KVM-OVER-IP SWITCH WHICH FULLY SATISFIED US,,

#### RESULTS

The EPAM Systems IT department has significantly increased productivity and reduced downtime of their servers. Reducing the number of cables in their data center racks has helped to improve air circulation within the data center.

# **KVM & SERIAL PRODUCT OVERVIEW**

For over 30 years Raritan has been at the forefront of developing cutting edge technology. From enterprise solutions to small businesses Raritan's KVM solutions are unmatched in quality and durability. Below you can find our current KVM portfolio.



#### **COMMANDCENTER® SG**

An easy to deploy, plug-and-play appliance that provides a single pane of glass access to all servers, storage, and network equipment.



#### **DOMINION® KX III**

Enterprise-class, secure KVM-over-IP switch that provides BIOS-level remote management of up to 64 multiplatform servers and serial-based devices in a single switch.



**DOMINION® KX II-101 V2** Palm-sized, single port KVM-over-IP for web-based remote management of a single server or a KVM-over-IP extender for an analog KVM switch.



#### **DOMINION® LX** High quality BIOS-level, KVM-over-IF remote management for 1 or 2 users, 8 or 16 ports and up to 256 servers with tiering.



#### **DOMINION® SX II**

Serial console server provides admins secure remote access, monitoring, and control all of their serial devices.



DOMINION<sup>®</sup> KSX II Solution for branch/remote offices and retail stores and racks with both serial and KVM-managed devices.



#### **PARAGON® II**

Enterprise, Cat5 analog KVM switch for high performance video switching.



#### LED-BACKLIT CONSOLE DRAWERS Connect to your existing KVM switches and provide video, keyboard, and touchpad functionality for managing multiple servers.



MASTERCONSOLE® CAT Compact, Cat5 KVM switch for one o two users to remotely manage up to 256 compare



CAT5 REACH<sup>®</sup> DVI Provides 1080p HD video quality while enabling extended remote access to DVI and VGA ports on PCs, servers, AV devices or KVM switches.



#### **RAV-IP DISTRIBUTION SYSTEM**

Economical, high performance video and audio streaming via HDMI video and audio, USB, infrared and serial.

DISCOVER HOW RARITAN CAN HELP YOU ADD INTELLIGENCE TO YOUR DATA CENTER.

START REDUCING COSTS AND IMPROVE EFFICIENCY, UPTIME AND CAPACITY PLANNING.

# READY TO LEARN MORE?

Contact us today to discuss your next rack power, access & control, serial or AV project. We have on-site demo facilities to show you our products live in action and a team of highly skilled people who are keen to answer any product related question you may have.





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