Features	Benefits
Next-Generation Console Server	
Raritan's Next-Generation Serial Console Server	The Dominion SX II is Raritan's next-generation Serial Console Server (also known as 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 and manageable serial-over-IP console server on the market. SX II provides productive, Java-free access to networking devices, servers, PDUs, telecommunications and other serial devices.
Ten Years of Serial Console Experience	For over ten years, thousands of customers have relied on the first generation Dominion SX for access and control of hundreds of thousands of serial devices, representing over 500 million hours of total operation. The SX II builds upon that experience with a wide range of advancements and innovations.
Java-free, Dominion Compatible User Interfaces	Starting with a powerful, Dominion hardware platform providing performance, reliability and security, the SX II includes virtually all the Serial-over-IP features of its predecessor, Java-free, Dominion compatible user interfaces and management features, plus exciting new capabilities.
Full CLI-based Configuration and Auto-Configuration	The SX II offers complete CLI access and management via SSH, Telnet and web-based user interface, with convenient direct port access. Two script-based automatic configuration methods are available for a fast installation and for subsequent configuration changes.
Exciting New Features and Innovations	The SX II new features include: military grade security features with 256-bit AES encryption and FIPS encryption mode, automatic DTE/DCE serial port detection, innovative at-the-rack access options, wireless modem support, IPv6 networking, script based auto-configuration and Java-free, Dominion compatible user interfaces and management.
CommandCenter Management & Scalability	With Raritan's CommandCenter, organizations can manage hundreds or even thousands of serial devices, spread across multiple locations, including branch offices.
Powerful Hardware Platform	
Powerful New Hardware Platform	Powerful new hardware platform with 1GHz CPU engine, with an 8-fold increase in RAM. Increased flash memory, up to 8 GB, for storage and logging. Front panel LED's show port connection status.
Wide Variety of 1U Models	Rackable, 1U models available in 4, 8, 16, 32 and 48 ports. All have dual power supplies and dual Gigabit Ethernet LAN ports. Models are available with an optional built-in modem. At-the-rack access includes RJ-45/serial, USB and KVM console.
Powerful Serial Processing Engine	The Dominion SX II with its powerful hardware platform provides high-powered serial processing for the most extreme use cases. Up to 10 users can simultaneously connect to a serial device connected to a SX II port. Up to 200 simultaneous user sessions are supported by a given SX II console server. Port configuration time is up to 23 times faster than the original SX. Connection

times are over 50 times faster.

Dual AC Power Supplies
All models have dual, 100-240 volt AC, auto-switching power supplies with automatic failover for increased reliability.

Dual DC Powered Models
Dual power and dual LAN, 8, 32 and 48 port DC powered models are available. These models provide the same features, serial access and performance as the AC powered models.

Dual Gigabit Ethernet LAN on all Models
Dual gigabit Ethernet LAN ports, which can be configured for simultaneous operation or automatic failover. Dual stack IPv4 and IPv6 networking.

Five USB Ports
The Dominion SX II has four USB 2.0 ports, three on the back panel and one on the front panel. These are available for local keyboard/mouse, 3G/4G cellular modem and for automatic configuration via USB drive. A USB 2.0 mini-B port is available for local laptop connection.

Optional Telephone Modem
All models have the option for an internal, 56K telephone modem with RJ11 connection for emergency access and disaster recovery.

Innovative Local Console
The Dominion SX II's local console provides multiple ways for at-the-rack access. The console includes a traditional RJ45 serial port, USB mini-B port, and even a DVI/USB KVM console.

Productive Serial-over-IP Access

Widest Variety of Serial-over-IP Access
The Dominion SX II supports the widest variety of serial-over-IP connections via SSH/Telnet Clients, Java-free web-browser, CommandCenter, telephony modem, cellular modem and at-the-rack access. This includes CLI, GUI and multiple Direct Port Access methods.

SSH/Telnet Client Access
SSH/Telnet client access from a desktop, laptop, or handheld device. Direct Port Access via SSH Client using a username/port string syntax. Customer can upload, view and delete SSH keys for greater security.

Java-Free, Web Browser Access
Java-free, web browser access via Dominion SX II or CommandCenter user interfaces and the HTML Serial Client (HSC).

Convenient Direct Port Access
Convenient Direct Port Access methods via SSH, Telnet & HTTP. IP address and TCP port-based access for Telnet and SSHv2 clients. Independent IP addresses or TCP port numbers can be assigned to access each SX II port. HTTPS-based direct access via URL. Com Port Redirection can be supported for third-party software redirectors.

Cellular and Telephone Modem Access
Optional external Cellular (3G/4G) modem and internal Telephone modem access for emergency access, business continuity and disaster recovery. Option to enable cellular modem only when LAN is not operational.

Innovative At-the-Rack Access
With the Dominion SX II, you get multiple types of local access at-the-rack. This includes: (1) Traditional RJ45 serial port, (2) Mini-USB port for laptop connection, and (3) DVI & USB-based KVM console for connection to a rackmount keyboard tray or even a KVM switch.

Port Keyword Monitoring and Alerting	Users can define up to 14 keywords per port. The SX II will scan the data coming from the port, and if one of the keywords is detected, it will send an alert via SNMP or e-mail. Serial devices are monitored, even when no user is connected! This results in faster notification that reduces Mean Time to Repair (MTTR).
Port Logging to Syslog, NFS and Local File	Port activity to and from serial devices can be logged to a Syslog server, Network File System (NFS) server or locally to the SX II device with up to 8 Gb of storage.
NFS Logging Features	Allows logging of all user keystrokes and server/device responses to NFS server(s). Can even be stored on the NFS server with user-defined encryption keys for greater security. Keep-alive messages in the NFS log allow easy monitoring if the managed server/device goes down.
SecureChat Instant Messaging	Allows for secure, instant messaging among SX II users. Enables collaboration of distributed users to increase their productivity, troubleshoot, reduce the time to resolve problems and for training purposes.
Automatic Serial Device Logoff	Once a user is timed out for inactivity, a user defined "logoff" command can be sent to the target. Improved security of user sessions results as serial sessions are automatically closed upon time out and not left open for possible un-authorized access.

Comprehensive Serial Device Access

Over Ten Years of Serial Device Management	The first generation Dominion SX has been serving customers for over ten years, with over 500,000 ports sold. This represents hundreds of millions of hours of operation across a wide variety of serial devices.
Automatic DTE/DCE Serial Port Detection and Naming	This feature allows for a straight Cat5 connections to Cisco equipment (and other compatible devices), without rollover cables. It also means that a SX II can replace the first generation SX with its existing serial device connections. Option to name ports based on serial device hostname.
Support for the Widest Variety of Serial Devices	Supports the widest variety of serial equipment including: networking routers, Ethernet switches, firewalls, UNIX/LINUX servers, Windows Servers, virtual hosts, rack PDU's, UPS systems, telecom/wireless gear. Supports multiple operating systems including SUN® Solaris, HP-UX, AIX, Linux®, Windows® Server 2012, and UNIX®.
Up to 230,400 Baud Serial Connections	Supports operating speeds of 1,200 to 230,400 bits-per-second for serial connections.
Flexible Serial Port Options	Flexible per-port serial options, including BPS, emulation, encoding, parity, flow control, stop bits, character and line delays, always-active connections and more. Multiple users can optionally write to a port simultaneously. Can define an exit command when the user times out, as well as enable an in-line menu for port commands and power control.

VT100/220/320/ANSI support	Increased choice of terminal emulation options, allows support of a broader range of devices. SX II supports the following code-sets: US-ASCII (ISO 646); ISO 8859-1 (Latin-1); ISO 8859-15 (Latin-9); UTF-8 and others.
Remote Power Control of Raritan PDU's (With Power Control Menu)	Raritan rack PDU's (PX, PX2, PX3, RPC) can be connected to the Dominion SX II for remote power control of the equipment connected to the PDU. Remote power control can be done via the SX II GUI, SSH/Telnet Client or CommandCenter. Outlet associations can be created for serial devices with multiple power supplies, such that these outlets can be controlled with a single power command. The SX II has "Control P" style menu commands for power control available during a serial session.

Security - Encryption

Strong 256 Bit AES Encryption	The SX II utilizes the Advanced Encryption Standard (AES) encryption for added security. 128- and 256-bit AES encryption is available. AES is a U.S. government-approved cryptographic algorithm that is recommended by the National Institute of Standards and Technology (NIST) in the FIPS Standard 197.
Validated FIPS 140-2 Cryptographic Module	For government, military and other high security applications, the Dominion SX II utilizes a validated FIPS 140-2 Cryptographic Module for enhanced encryption. Modules tested and validated as conforming to FIPS 140-2 are accepted by federal agencies of the U.S. and Canada for the protection of sensitive information.
Enhanced Encryption Options	Support more encryption options: web-browser security through 256 and 128-bit SSL encryption; for SSHv2 connections, AES and 3DES are supported (client-dependent).

Security - Authentication

External authentication with LDAP, Radius, TACACS & Active Directory	Dominion SX II integrates with industry-standard directory servers, such as Microsoft Active Directory, using the LDAP, RADIUS and TACACS protocols. This allows Dominion SX II to use pre-existing username/password databases for security and convenience. RSA SecureID is supported via RADIUS for added security.
Upload Customer-Provided SSL Certificates	Customers can upload to the Dominion SX II digital certificates (self-signed or certificate authority provided) for enhanced authentication and secure communication.
Configurable Strong Password Checking	The Dominion SX 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.
Configurable Security Banner	For government, military and other security-conscious customers requiring a security message before user login, the SX II can display a user-configurable banner message and require acceptance before user login.

SSH Client Certificate Authentication	In addition to authentication via login/password, on the SSH interface users can be authenticated via SSH certificates. Each local user can be assigned up to 10 SSH keys. The key authentication takes the place of the login/password
Local Authentication with Users, Groups and Permissions	In addition to external authentication, the Dominion SX II supports local authentication. Administrators can define users and groups with customizable administration and port access permissions.
Login and Password Security	The SX II includes multiple login and password security features including password aging, idle timeout, user blocking and login limitations. Failed login attempts can be result in lockouts and user deactivation.
SHA-2 Certificate Support	Support for the more secure SHA-2 certificates.

Security - Networking

Dual Stack IP Networking – IPv4 and IPv6	The Dominion SX II provides dual-stack IP networking with simultaneous support of IPv4 and IPv6.
IPTables Firewall support	Fully configurable "iptables" firewall support. User selectable and customizable system security levels catering to wide range of security needs.
Selective Static Routing Support	Supports connections between modem and LAN 1, modem and LAN 2 or LAN 1 and LAN 2. This allows users to utilize two different networks (Public and Private) and modem access to KVM or Ethernet controlled devices. When used with the firewall function, secure access can be enabled.
TCP/IP Port Management	Can disable TELNET and SSH access if desired. Ability to change these ports in addition to HTTP, HTTPS and discovery ports
Prevent Man In The Middle Attacks	Enhanced security of communication channels by using client and server SSL certificates.
Modem Dial-Back Security	For enhanced security, Dominion SX supports modem dial-back.
Rejects SSHv1 Requests	Due to the many known security vulnerabilities of the SSHv1 protocol, the Dominion SX will automatically reject SSHv1 connections.
TLS Security Options	Can optionally disable specific TLS options considered insecure.

Java-Free User Experience

Java-Free User Interface	The SX II has a Java-free user interface with the new HTML Serial Client.
Multiple User Interfaces	The SX II supports multiple user interfaces giving the user the freedom to use the interface best suited for the job at hand. This includes remote access via Raritan Java-free or third party serial client via CLI, Raritan graphical user interface (GUI), at-the-rack access or via CommandCenter. Convenient direct port access methods available.

Full Modern CLI – GUI Equivalence	Full CLI management and configuration, thereby allowing scripting of any command.
Broad Range of Supported Browsers	Offers broad range of browsers — Firefox, Internet Explorer and Chrome.
International Language Support	The web-based user interface supports English, Japanese and Chinese languages. The Raritan Serial Console can support four languages: English, Japanese, Korean and Chinese
PC Share Mode	Up to ten users can connect and remotely access each connected serial device up to a maximum of 200 serial sessions. Sharing feature is very useful for collaboration, troubleshooting and training.

Easy to Install and Manage

Full CLI-based Configuration and Management	The SX II offers complete CLI administration and management via SSH, Telnet and web-based user interface. Two script-based automatic configuration methods are available for a fast installation and for subsequent configuration changes.
Automatic Configuration via USB Drive	The SX II can be optionally configured via a CLI script on a USB drive connected to one of its USB ports. This can be used for initial configuration or subsequent updates.
Automatic Configuration via TFTP Server	The SX II can be optionally configured via a second method, i.e. via a CLI script contained in a TFTP server. This can be used for initial configuration or subsequent updates. The TFTP server address can be retrieved via DHCP or set by the administrator. Users can export the SX II configuration database to a human-readable format.
Automatic Port Naming	Option to automatically name serial ports based on the login prompt from the serial device.
Dominion-Compatible Management	Dominion-compatible management features are available via a web-based user interface or CLI. This includes Dominion-style User Management, Device Settings, Security, Maintenance, Diagnostic and Help features. Firmware update via web browser without the use of an FTP server.
Easy to Install	Installation in minutes, with just a web browser, CLI or automatic configuration. Some competitive products require burdensome editing of multiple files to complete a basic installation.
Configurable Event Management and Logging	The SX II generates a large variety of device and user events including: device operation, device management changes, security, user activity and user administration. These can be selectively delivered to: SNMP, Syslog, email (SMTP) as well as stored on the SX II in the audit log. Support for SNMP v2 and v3,

Raritan CommandCenter® Management and Scalability

Raritan's CommandCenter Centralized Management	Like the rest of the Dominion series, Dominion SX II features complete CommandCenter Secure Gateway integration, allowing users to consolidate all Dominion SX II and other Raritan devices into a single logical system, accessible from a single IP address, and under a single remote management interface.
Manage Hundreds of Serial Devices	When deployed with CommandCenter Secure Gateway, hundreds of Dominion SX II devices (and thousands of serial devices) can be centrally accessed and managed.
Single IP Address for Administration and Device Connection	Administrators and users can connect to a single IP address via CommandCenter Secure Gateway to manage the SX II or access the attached serial devices. This connection can be via web browser or through SSH. Option for SX II at-the-rack access while under CC-SG management.
Bulk Firmware Upgrades	Administrators can schedule firmware upgrades (and other operations) for multiple SX II devices from CommandCenter.
Remote Power Control via CommandCenter Secure Gateway	CommandCenter supports remote power control of Raritan PX rack PDU's connected to serial ports on the Dominion SX II. For equipment with multiple power feeds, multiple power outlets can be associated together to switch equipment on or off with a single click of the mouse.