



## Dominion® SX

### Secure Console Server: Serial Control and Management via SSH, Telnet and Web Browser



#### Dominion SX Series

Secure, multi-user remote serial access of up to 48 target servers and IT devices

#### Dominion SX4

– 4 Serial ports

#### Dominion SX8

– 8 Serial ports

#### Dominion SX16

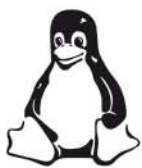
– 16 Serial ports

#### Dominion SX32

– 32 Serial ports

#### Dominion SX48

– 48 Serial ports



#### Secure, out-of-band remote management capability with maximum security and integrated power control

Dominion SX enables IT professionals to access, monitor and control all their serial devices securely, anytime, from anywhere. Easy to install, simple to use, secure and scalable, the Dominion SX provides one point of control to manage a wide range of servers and IT devices:

- ▶ Servers and headless servers - Sun® Solaris™, HP-UX, UNIX®, Linux®, IBM® AIX® and Windows Server™ 2003
- ▶ WAN equipment - ISDN terminal adapters, channel banks, CSU/DSUs, PBX/PABXs and WDM
- ▶ Networking equipment - routers, ethernet switches, firewalls
- ▶ Fully featured power control for Dominion PX with outlet associations for servers and networking devices with multiple power feeds

#### A cost-effective solution to reduce network downtime and IT costs

With Dominion SX, you can:

- ▶ Optimize and troubleshoot networks via proactive event notification and data logs
- ▶ Restore network connectivity and server operation via out-of-band direct serial or dial-up access
- ▶ Troubleshoot, maintain and manage remote locations 24/7 from a single location, minimizing travel costs
- ▶ CPU Watchdog Timer: monitors the health of the software. LED blinking logic is added to indicate activity of Serial port, LAN port and operating system heartbeat

#### Simple

- ▶ Easy and convenient access via SSH/Telnet or browser
- ▶ Plug-and-play setup without complicated client software

#### Secure and highly available

- ▶ Encrypts all communications via 128-bit SSL with RC4 encryption or AES/3DES with SSHv2
- ▶ Provides common authentication and authorization for all local and remote users and administrators
- ▶ Available models with dual power supplies, built-in modem and redundant LAN interface
- ▶ Prevents unauthorized or inadvertent adds, changes and deletes

# Anytime, anywhere access and control

## Scalable

- ▶ Models available from 4 to 48 ports
- ▶ Scalable to a large number of units when deployed in conjunction with Raritan CommandCenter® Secure Gateway

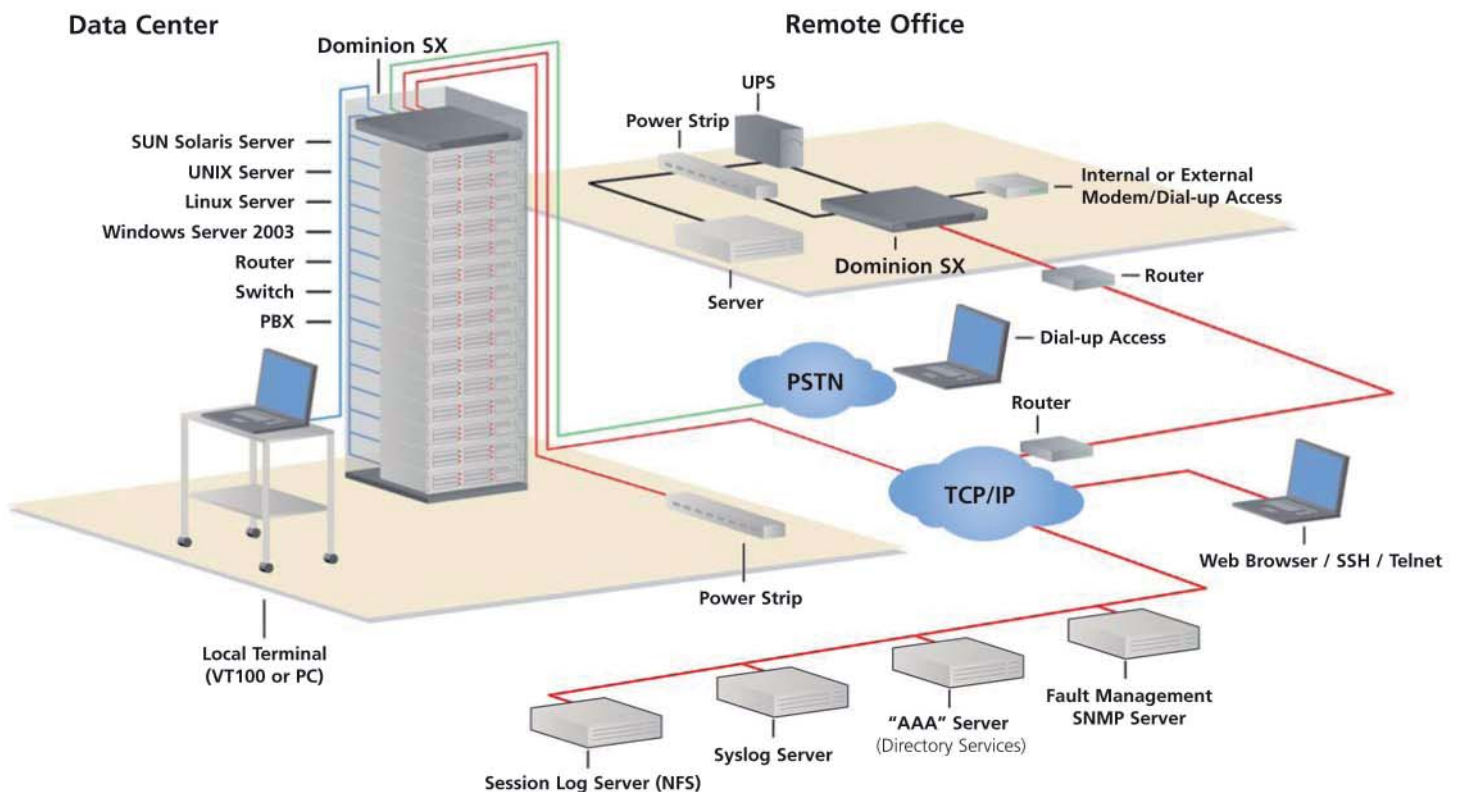
## Applications

- ▶ Server and network management
- ▶ Remote console management of Remote Offices/Branch Offices
- ▶ Integrated Power Management

## Security

- ▶ Appliance architecture prohibits access to Linux shell
- ▶ Up-to-date SSHv2 and SSL
  - SSHv2 with AES, 3DES encryption modes
  - SSL with 128-bit RC4 encryption
- ▶ User ID and flexible strong password support

- ▶ Man-In-The-Middle (MITM) attack mitigation utilizing user supplied SSL Client Certificates
- ▶ Customizable security profiles
- ▶ Customizable security banner with option to audit banner acceptance
- ▶ TLS 1.0 support
- ▶ Fully-featured firewall and access control lists – with added pre- and post-routing and Static NAT (SNAT) support
- ▶ Authentication and authorization at the port level
- ▶ Primary and secondary RADIUS, TACACS+, LDAP(S), Kerberos v.5 or Microsoft Active Directory® servers with failover
- ▶ Modem call-back with Linux and Windows 2000/XP
- ▶ Encrypted username/password database
- ▶ Idle timeout and target session timeout for improved security
- ▶ Remote reboot and restore to factory default capability



# Secure console level management

## Console management

- ▶ Configurable setting for allowing single or multiple logins per user
- ▶ Port sharing between SSH, Telnet, Local Port and Browser SSL users for up to 10 users per port
- ▶ Local and remote logging of console messages
- ▶ SecureChat allows multiple users to collaborate with 128-bit SSL encryption
- ▶ HTTP/HTTPS (Java-enabled browsers: Mozilla® Firefox 1.5+, Internet Explorer 6.0+; Sun JRE1.4.2 or higher)
- ▶ Direct port access via IP address for SSH/Telnet/HTTP(S) or TCP port for SSH and Telnet
- ▶ Standalone Raritan Serial Client (Java-based) for use on Windows®, Solaris™, and Linux®. Downloadable applet provides a common user-experience
- ▶ Copy and paste session information among different ports
- ▶ Encrypted session logging to NFS Server
- ▶ Standard built-in modem for select models
- ▶ Windows Server 2003 EMS support
- ▶ Solaris Ready™ certified (Sun "break-safe")
- ▶ VT100/220/320 ANSI emulation with dynamic font resizing or fixed fonts
- ▶ Optional support for unencrypted access (off by default)
- ▶ User controlled write-access sharing with write-lock capability

## Management

- ▶ Equivalent administration features via HTML-based GUI and Command Line Interface (SSH/Telnet)
- ▶ Keyword recognition and alarming (port triggers)

- ▶ Event notification via e-mail (SMTP) with persistent attempts (automatic retries) to send SMTP notifications and support for mail server authentication
- ▶ SNMP traps
- ▶ IPMI support for targets over IP
- ▶ Raritan Power Control units managed via CLI or GUI
- ▶ Dual Ethernet ports to support separate networks (some models only)
- ▶ NTP support (primary and secondary servers)
- ▶ Syslog (primary and secondary servers)
- ▶ Diagnostic commands to aid in troubleshooting connection problems
- ▶ Backup/restore device configurations using FTP server

## CommandCenter Secure Gateway Integration

- ▶ Managed with centralized authentication and authorization using a single IP address
- ▶ Centralized user, group and role-based permission management
- ▶ Remote device access through a simple user GUI interface or direct SSH
- ▶ Real-time view and management of active user sessions and active-ports
- ▶ Centralized firmware upgrades and backup/restore of devices
- ▶ Power control with multi-outlet association

## Language

Available with support for Chinese, Japanese and Korean languages

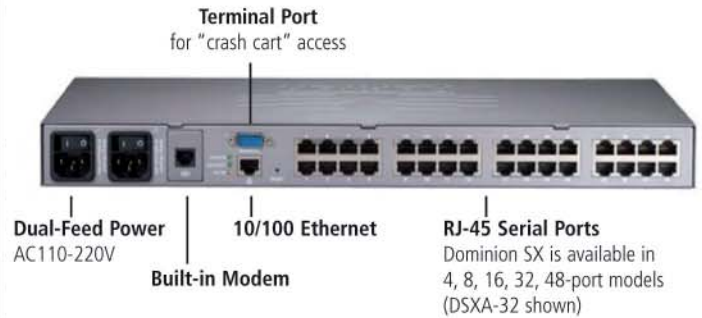
**Ready to manage smarter?**

**Do it with Dominion SX.**

# Specifications

## All Dominion SX models

<b>Form factor</b>	1U, rack mountable (brackets included on DSX16, DSX32, DSXA-8 and DSX48)
<b>Power</b>	110/240VAC auto-switching: 50-60 Hz
<b>Max. Power Consumption</b>	4-port SX: 5.75W 8-port SX: 6W 16-port SX: 8W 32-port SX: 9.375W 48-port SX: 12.5W
<b>Environmental requirements</b>	
<b>Operating temperature</b>	0°C to 40°C
Humidity	20% - 85% RH non-condensing
Altitude	Operates properly at any altitude from 0 to 3,000 meters
<b>Approvals</b>	CE, FCC Part 15 Class A, US and Canadian UL, VCCI-A
<b>Remote connection</b>	
Network	10/100 Ethernet (RJ-45) - one or two
Protocols	TCP/IP, PPP, PAP, HTTP, HTTPS, SSL, SSH, TACACS+, LDAP(S), RADIUS, SNMP, Kerberos
<b>Warranty</b>	<b>Two Years.</b> In addition, Raritan offers two years extended warranty.



Dominion SX Models	Ports	Built-in Modem	Local Ports	Ethernet Ports	Power Supply	Dimensions - (WxDxH)	Weight
<a href="#">DSX4</a>	4	No	2	1	Single-AC	290 x 270 x 44mm	2.08kg
<a href="#">DSXB-4-M</a>	4	Yes	1	1	Single-AC	290 x 270 x 44mm	2.08kg
<a href="#">DSX8</a>	8	No	1	1	Single-AC	290 x 270 x 44mm	2.17kg
<a href="#">DSXA-8</a>	8	Yes	1	1	Dual-AC	440 x 290 x 44mm	3.60kg
<a href="#">DSXB-8-M</a>	8	Yes	1	1	Single-AC	290 x 270 x 44mm	2.17kg
<a href="#">DSXA-16</a>	16	Yes	1	1	Dual-AC	440 x 290 x 44mm	3.76kg
<a href="#">DSXA-16-DL</a>	16	No	2	2	Dual-AC	440 x 290 x 44mm	3.86kg
<a href="#">DSXA-16-DLM</a>	16	Yes	1	2	Dual-AC	440 x 290 x 44mm	3.86kg
<a href="#">DSXA-32</a>	32	Yes	1	1	Dual-AC	440 x 272 x 44mm	3.78kg
<a href="#">DSXA-32-AC</a>	32	No	2	1	Dual-AC	440 x 290 x 44mm	3.78kg
<a href="#">DSXA-32-DL</a>	32	No	2	2	Dual-AC	440 x 290 x 44mm	3.95kg
<a href="#">DSXA-32-DLM</a>	32	Yes	1	2	Dual-AC	440 x 290 x 44mm	3.95kg
<a href="#">DSXA-48</a>	48	Yes	1	2	Dual-AC	440 x 290 x 44mm	4.04kg
<a href="#">DSXA-48-AC</a>	48	No	2	2	Dual-AC	440 x 290 x 44mm	4.04kg

## Cables/Adapters/Brackets

Part number	Description
<a href="#">ASCSD89F</a>	RJ-45(F) to DB9(F) serial adapter
<a href="#">ASCSD89M</a>	RJ-45(F) to DB9(M) serial adapter
<a href="#">ASCSD825F</a>	RJ-45(F) to DB25(F) serial adapter
<a href="#">ASCSD825M</a>	RJ-45(F) to DB25(M) serial adapter
<a href="#">ASCSD89F-DCE</a>	Serial Adapter for DB9 DCE Port to Dominion SX
<a href="#">CRLVR-15</a>	15' (4.5m) serial rollover Cat5 cable - for most Cisco and Sun serial RJ-45 ports
<a href="#">CSCSPCS-10</a>	10' (3m) Cat5e cable to connect Dominion SX to Raritan remote power control unit

Part number	Description
<a href="#">CRLVR-1</a>	1' (0.3m) serial rollover Cat5 adapter cable (RJ45 Male to RJ45 Female) - for most Cisco and Sun serial RJ-45 ports
<a href="#">CRLVR-1-5PK</a>	Package of 5 CRLVR-1 (1'; 0.3m) serial rollover Cat5 adapter cables (RJ45 Male to RJ45 Female) - for most Cisco and Sun serial RJ-45 ports
<a href="#">CSCSPCS-1</a>	1' (0.3m) Cat5e adapter cable (RJ45 Male to RJ45 Female) to connect Dominion SX to Raritan remote power control unit
<a href="#">CSCSPCS-1-5PK</a>	Package of 5 CSCSPCS-1 (1'; 0.3m) adapter cables (RJ45 Male to RJ45 Female) to connect Dominion SX to Raritan remote power control unit
<a href="#">RUST-LM304</a>	19" (482.6mm) standard rack mount brackets for DSX4, DSXB-4-M, DSX8, and DSXB-8-M

Only RoHS and WEEE compliant units are available in the EU and other selected areas. RoHS and WEEE compliant units can be provided elsewhere upon request.