SN9116

The SN Series of Serial Console Servers integrates cutting edge technology to provide secure serial device access and management for data centers. Available in 16 port models, the Serial Console Servers offer both in-band and out-of-band remote serial console access to servers and network devices via a direct Telnet/SSH client and applet viewer. SN Serial Console Servers work in tandem with ATEN's Power Over the NET™ remote power management systems. Both can be utilized through ATEN's CC2000 software to provide centralized serial device access and integrated power management. With its comprehensive features, the SN Series of Serial Console Servers help to maximize IT productivity, increase scalability and reduce operational costs with easy remote management of serial devices.

ATEN Serial Console Servers are used to connect serial devices to an Ethernet network to allow access and control of demanding applications that manage industrial control, data acquisition, environment monitoring, remote facility operations and equipment. The SN Series offers multiple operational modes that include Real COM Port, TCP Server/Client, UDP Server/Client, Serial Tunnel and Virtual Modem. Our Serial Console Servers help transform the capabilities of serial devices by taking advantage of network access to configure and manage control of these devices from anywhere in the world via the Internet.

The ATEN Serial Console Server is a secure remote access and control solution for any serial device. Access rights and privileges can be applied to 16 individual serial ports while consolidated password authentication simplifies management. For security, data encryption is provided to ensure information and control is always protected. Logging and alerting of system events helps to quickly resolve issues and mitigate risks. Enhanced security functions are integrated to ensure the compliance of internal security mandates. The Serial Console Server's ease of use, vast accessibility and manageability of serial devices and servers enable a business to quickly integrate remote control of serial devices to consolidate operations and run facilities more effectively.

The SN series offers out-of-band (OOB) management that enables IT administrators to manage network devices (e.g. router, switch, UPS) in server rooms via management networks that are separate from the main/production networks. So if there's difficulty in accessing the network devices through the production network, the administrators can still access them via the console server. The console server offers several out-of-band access methods, such as a direct console connection from a local computer, a USB console connection from a laptop, a PSTN connection via modem, or a dedicated management network connection via the Ethernet (LAN) port.

The SN series of serial console servers save you time and money by allowing administrators to manage their data centers from practically anywhere – minimizing travel and MTTR (Mean Time to Repair) costs, ensuring the highest availability for data center services possible.

• System Compatibility Table
• Adapter Diagrams
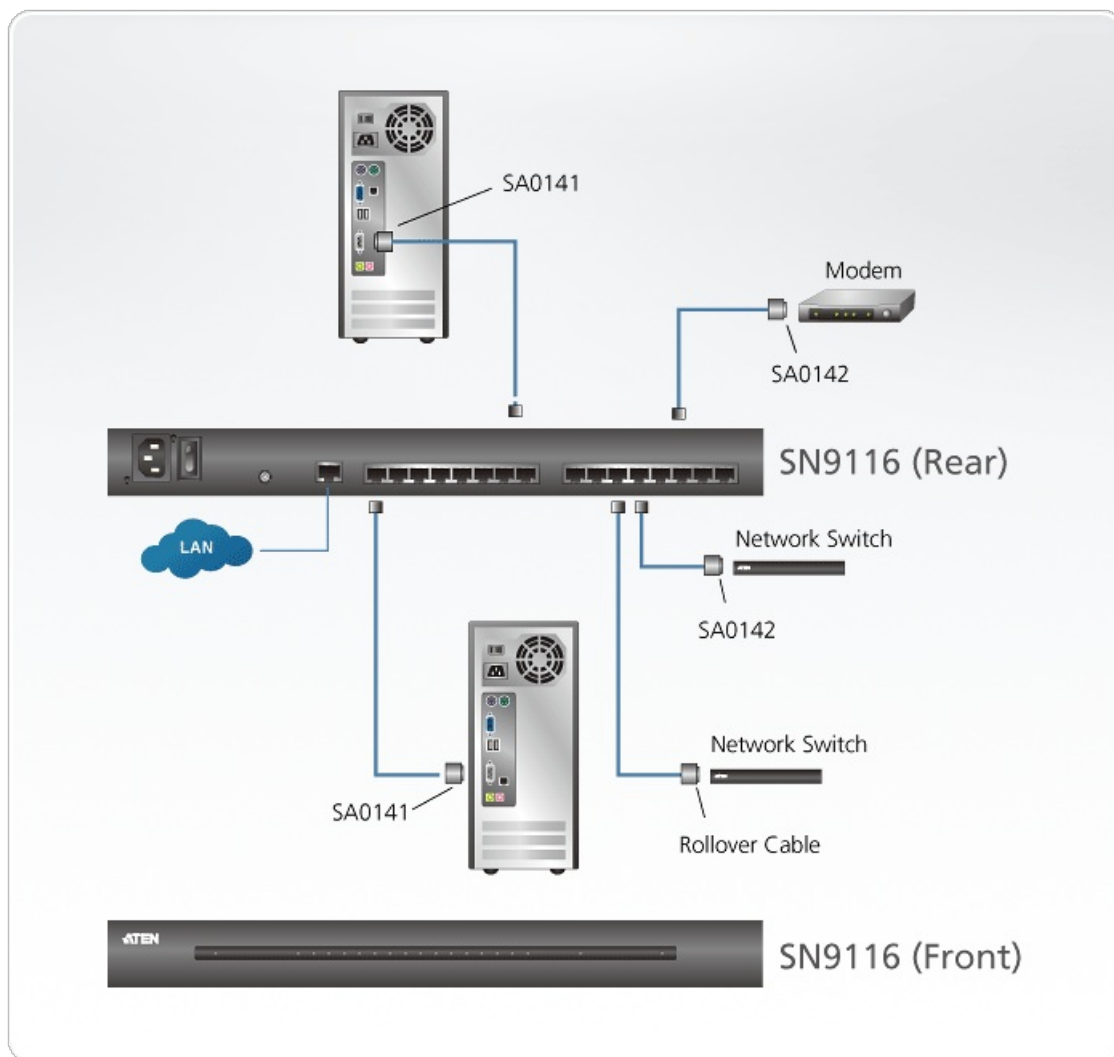
Features

- **System Accessibility and Availability**
- Secure in-band and out-of-band remote serial console access
- In-band Ethernet access of serial devices
- Browser access with an intuitive GUI
- Terminal-based access with a menu-driven UI
- Out-of-band access via dial-up modem
- Modem dial-in/dial-back/dial-out

- **Serial Console Management**
- Convenient and simple serial device access via browser or Telnet/SSH client
- Port access via Telnet/SSH client and third-party clients such as PuTTY
- Direct port access from Telnet client – bypasses SN login
- Convenient port access via the applet serial viewer from SN Web GUI
- Selectable Telnet or SSH serial viewer
- Selectable ActiveX or Java serial viewer
- Comprehensive viewer function – Copy/paste, logging, data import, Macro, broadcast and Message Board
- Sun Solaris ready – Sun "break-safe"
- Alert Strings
- Command filter – administrators can define what commands cannot be executed by users
- Data buffering
- Multiple users can simultaneously access to the same port – up to16 connections per port
- Selectable mode for multiple simultaneous access – Exclusive/Occupy/Share mode
- Integrated with Power Over the NET™ product for port and power outlet association

- **Security**
- SSH and SSL (TLS v1.0 / TLS v1.1 / TLS v1.2) support
- Secure login from browser with TLS 1.2 data encryption and RSA 2048-bit certificates
- Configurable user permissions for port access
- Configurable group permission for port access
- Local and remote authentication and logging
- Third-party authentication via RADIUS, TACACS+, LDAP/AD and Kerberos
- IP filtering and MAC filtering

- **System Management**
- System configuration via web browser, Telnet/SSH client and local console
- System log and event logging
- Comprehensive logging and event notification
- ATEN Log server and Syslog server
- SNMP agent
- Event notification – via SMTP email, SNMP Trap and SMS (to mobile devices)
- Backup/restore system configuration
- Firmware upgradeable
- Multi-browser support – Internet Explorer, Chrome, Firefox, Safari, Opera and Mozilla
- Customizable global time zone
- NTP for time server synchronization
- DHCP for dynamic IP address assignment
- IPv6 support
- Integrates with CC2000 for centralized data center management

- **Serial Device Management**
- Versatile serial operating modes – support Real COM, TCP Server, TCP Client, UDP, Serial Tunnel and Virtual Modem
- 128-bit/256-bit SSL encryption (TLS v1.0 / TLS v1.1 / TLS v1.2) for Real COM, TCP Server, TCP Client, Serial Tunnel and Virtual Modem
- Real COM driver for Windows 2000 or higher and Windows Server 2003/2008
- Real TTY driver for Linux
- Fixed TTY driver for UNIX

- **Language**
- Web-based GUI multi-language – available for English, German, Japanese, Korean, Russian, Simplified Chinese and Traditional Chinese

Specification

Connection	16
Connectors	
Serial	16 x RJ-45 Female
LAN Ports	1 x RJ-45 Female
Power	1 x IEC60320/C14
Switches	
Reset	1 x Recessed Pushbutton
Power	1 x Rocker Switch
LEDs	
Serial	16 (Green)
10/100/1000 Mbps	1 (Red / Orange / Green)
Power	1 (Blue)
Maximum Input Power Rating	100-240V~, 1A, 50/60Hz
Power Consumption	AC110V:10.9W:51BTU/h AC220V:11.6W:54BTU/h Note: ● The measurement in Watts indicates the typical power consumption of the device with no external loading. ● The measurement in BTU/h indicates the power consumption of the device when it is fully loaded.
Environmental	
Operating Temperature	0 - 40˚C
Storage Temperature	-20 - 60˚C
Humidity	0 - 80% RH, Non-condensing
Physical Properties	
Housing	Metal
Weight	3.16 kg (6.96 lb)
Dimensions (L x W x H)	43.72 x 21.76 x 4.40 cm (17.21 x 8.57 x 1.73 in.)
Note	For some of rack mount products, please note that the standard physical dimensions of WxDxH are expressed using a LxWxH format.

Diagram