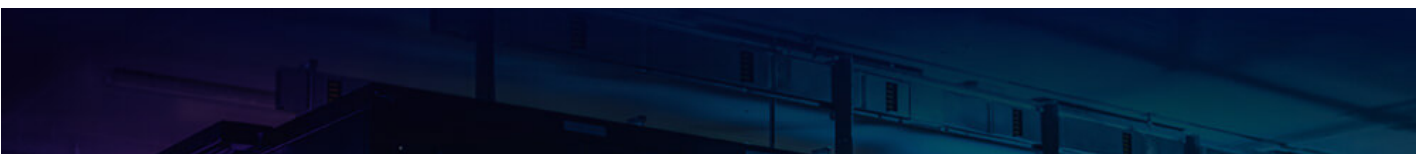# CN9000

1-Local/Remote Share Access Single Port VGA KVM over IP Switch

Want to test this unit?

How to set up ATEN Single-port KVM over IP Switches (CN Series) for remote work

Reinforcing Remote Work
Dual LAN / Power Sustain Uninterrupted Operations

Power x2   Network x2

CN9000 ▲
1-Local/Remote Share Access Single Port VGA KVM over IP Switch

Secure Your New Normal with a Direct Hack-proof Connection

The CN9000 provides over-IP capability for remote access to a dedicated PC/server via a direct BIOS-level, hack-proof network connection, as well as visual excellence up to 1920 x 1200 @ 60 Hz at both local and remote consoles by utilizing an FPGA graphics processor. It allows for secured remote access to audio, video, and virtual media, facilitating instant file sharing and system updates over the network without the need for any extra software installation or configuration.

The CN9000 KVM over IP switch is ideal for global organizations and companies with several office locations by bridging local and remote workplaces with a seamless connection without any restriction or loss in productivity. It is a secure and practical solution to help keep businesses afloat during a downturn or global crises.

LAN/Power Redundancy

Audio Enabled

Virtual Media

Virtual Reboot

Security Guarded Remote Access, Wherever You Are

The CN9000 provides a direct BIOS-level connection to the dedicated PC/server to allow for instant remote access from different locations without requiring any extra software installation or configuration.

Dual LAN / Power Redundancy

The CN9000 is equipped with dual LAN / power connectivity that strengthens system reliability by maintaining uninterrupted operations during any contingency. Power connectors are fastened with screw locks to ensure robust power failover, and power status can be identified easily via the LED indicators.

External Storage Drive

Virtual Media Support for Prompt System Updates
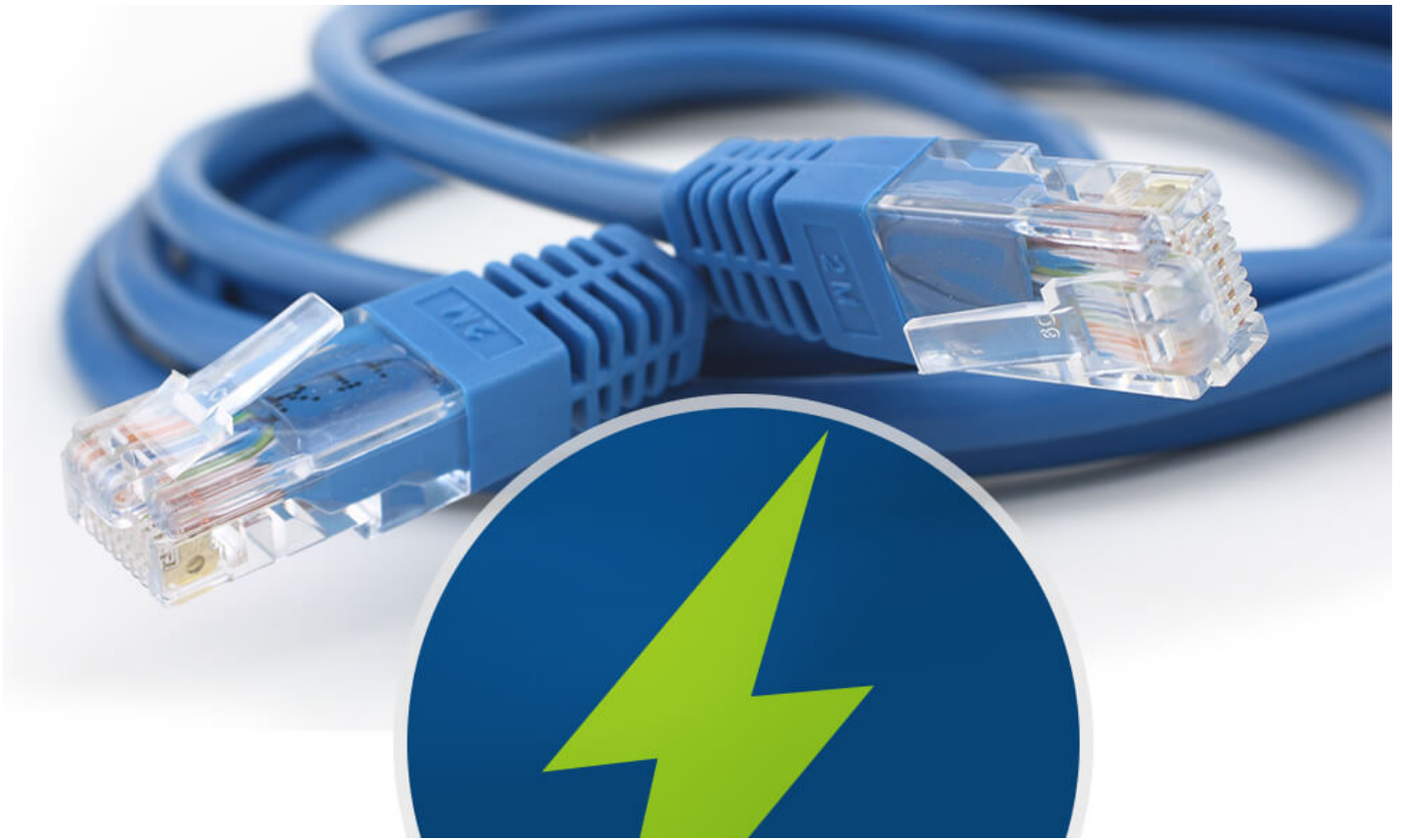
The CN9000 enables authorized virtual media support to run file applications and software installations over the network, and this is especially useful for diagnosing and troubleshooting network and BIOS issues, as well as performing software updates and patches to keep your system up-to-date.

DI and Relay Connectivity for Contingency Approach

The CN9000 comes built in with a 5-pin control terminal for a DI input connection for system alerts (from a thermometer, humidity/door sensor), as well as a relay terminal for a virtual power-on feature that remotely reboots a hung or crashed PC/server to ensure constant system availability for mission-critical applications.


Applications

The CN9000 is ideally suited for use in control rooms and server rooms of diverse industries, as well as work-from-home scenarios.

Hack-proof Remote Access Solution in Action

Unlike third-party solutions, such as RDP (Remote Desktop Protocol) and VNC (Virtual Network Computing), a KVM over IP switch does not require any additional driver/software and can operate independently of a functional operating system when the PC/server is in its BIOS-level state. KVM access to the PC/server is built upon a direct connection with the keyboard, video and mouse, while the communication between the PC/server and the remote workstation is securely strengthened with encryption. This hack-proof hardware-based remote access path is separated from the operation network to keep data and workflow secure from end to end, and allows the PC/server to remotely perform system reboots and installation of software updates in case of emergency. Hence, there are zero concerns about data leakage, backdoors, or any form of cyber attack, which is something that a software solution simply cannot guarantee.

Software Solution

Hotel

Overseas

Home

Internet

LAN

HQ's Office & Server

● Network
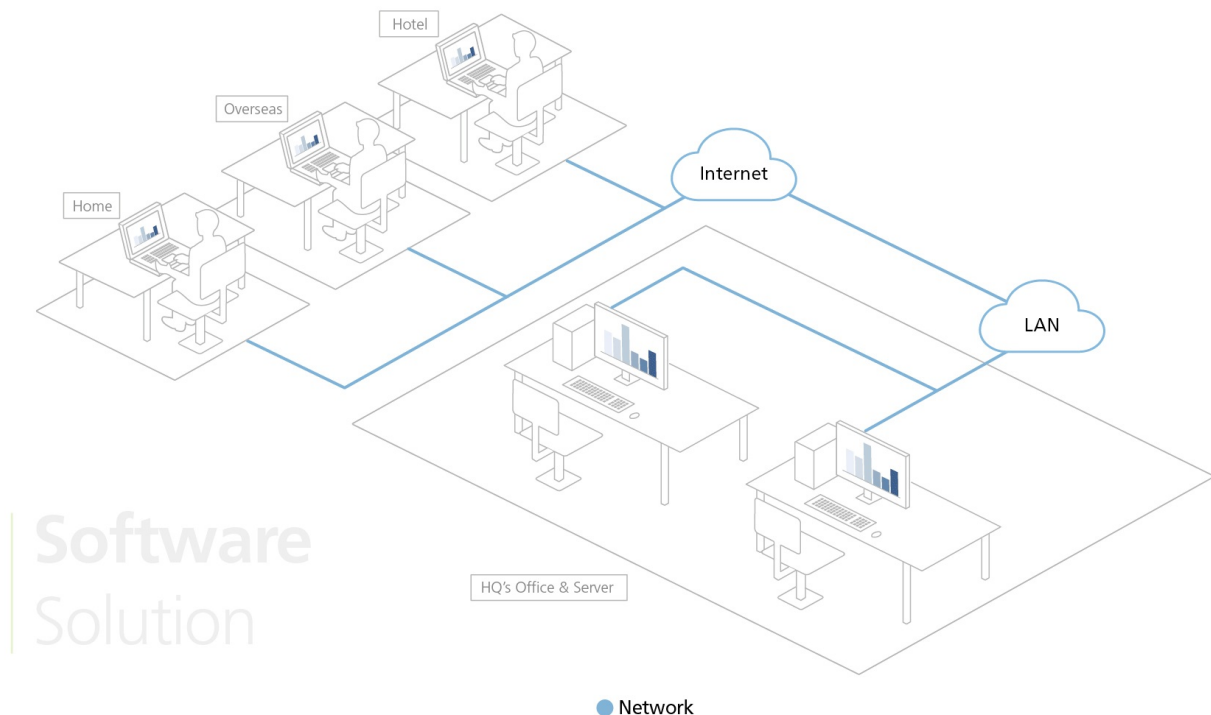
Product Comparison

Features

The CN9000 VGA KVM over IP Switch allows remote access and control of the video, audio, and virtual media of a PC or workstation and features VGA high-definition video with resolutions of up to 1920 x 1200 @ 60 Hz at both the local and remote consoles. Equipped with USB and PS/2 (keyboard and mouse) support, CN9000 is compatible with not only modern-day workstations but also older legacy systems and servers.

For user-friendly operation, a mini USB port on the front panel is designed as a Laptop USB Console (LUC) port for connection to a laptop, which allows the user to access the PC / server for easy routine maintenance without requiring an additional monitor, keyboard, and mouse.

To ensure seamless connectivity, the CN9000 is equipped with dual LAN and dual power functionality to keep operation in the server room smooth and efficient. Its power status detection function automatically sends out event notifications when the device becomes offline (e.g. power failure) for device status monitoring. Moreover, the CN9000 features a 5-pin Relay / DI (digital input) terminal block allowing for remote reboot of the local server, and receiving digital inputs from a connected input/alarm device for notification of critical events.

For ease of remote management, the CN9000 WebClient Viewer supports remote desktop access without additional software applications. The VGA KVM over IP Switch provides a web-based GUI for remote access and management. With a unified multilanguage interface, it can effectively minimize user training time and increase productivity.

Hardware

- High video resolution – up to 1920 x 1200 @ 60 Hz
- Laptop USB Console (LUC) – a dedicated mini USB port for direct, easy console operation via a laptop
- Provides over IP capability to KVM switches without over IP functionality
- Provides an FPGA graphics processor for better image quality
- Dual power supply to ensure seamless connectivity
- Two 10 / 100 / 1000 Mbps NICs for redundant LAN or two IP operation
- Supports 5-pin Relay / DI Terminal for environment monitoring and remotely reboot control
- Supports USB and legacy PS/2 keyboard and mouse

Management

- Complies to the RS-232 standards for serial control
- Up to 64 user accounts – up to 32 users can simultaneously share control
  Note: As more users connect to the device, the bandwidth allocated to each user decreases.
- Console access right management
- End session feature – administrators can terminate running sessions
- Event logging and Windows-based Log Server support
- Event Logging – the CN9000 can record all events that take place on it and write them to a searchable database
- Supports instant notification of critical system events via email, SNMP trap and Syslog
- Firmware upgradable via remote access
- Access the CN9000 via a built-in serial viewer, or third-party software (such as PuTTY) for Telnet and SSH sessions
- Out of Band support – access the CN9000 through its serial port using a dial-up connection
- Port Share Mode allows multiple users to gain access to a server simultaneously

- DDNS – allows mapping of a dynamic IP address assigned by a DHCP server to a host name
- Supports export / import of user account and configuration settings
- Supports permission-controlled browser operation
- Supports IPv6
- Integration with ATEN CC2000 Management Software
- Integration with ATEN CCVSR Video Session Recording Software

Easy-to-Use Interface

- Browser-based and AP GUIs offer a unified multilanguage interface to minimize user training time and increase productivity
- Multiplatform client support (Windows, Mac, Linux, Sun)
- Multibrowser support (IE, Firefox, Safari, Opera, Chrome)
- Browser-based UI in pure Web technology allows administrators to perform administrative tasks without pre-installed Java software package requirements
- Full-screen or sizable and scalable Virtual Remote Desktop
- Magic Panel with configurable function for quick launch

Advanced Security

- External authentication support: RADIUS, LDAP, LDAPS and MS Active Directory
- Supports TLS 1.2 data encryption and RSA 2048-bit certificates to secure users logging in from browsers RC4 or Random for independent keyboard / mouse, video, and virtual media data encryption
- Flexible design allows users to choose any combination of encryption algorithms (e.g. 256-bit AES) or system-generated random selection for independent keyboard / mouse, video, and virtual media data encryption
- Supports IP / MAC Filter
- Supports password protection
- Private CA

Virtual Media

- Virtual media enables file applications, OS patching, software installation and diagnostic testing
- Works with USB-enabled servers at OS and BIOS level
- Supports USB 1.1 and USB 2.0 DVD / CD drives, USB mass storage devices, PC hard drives, folders and ISO images
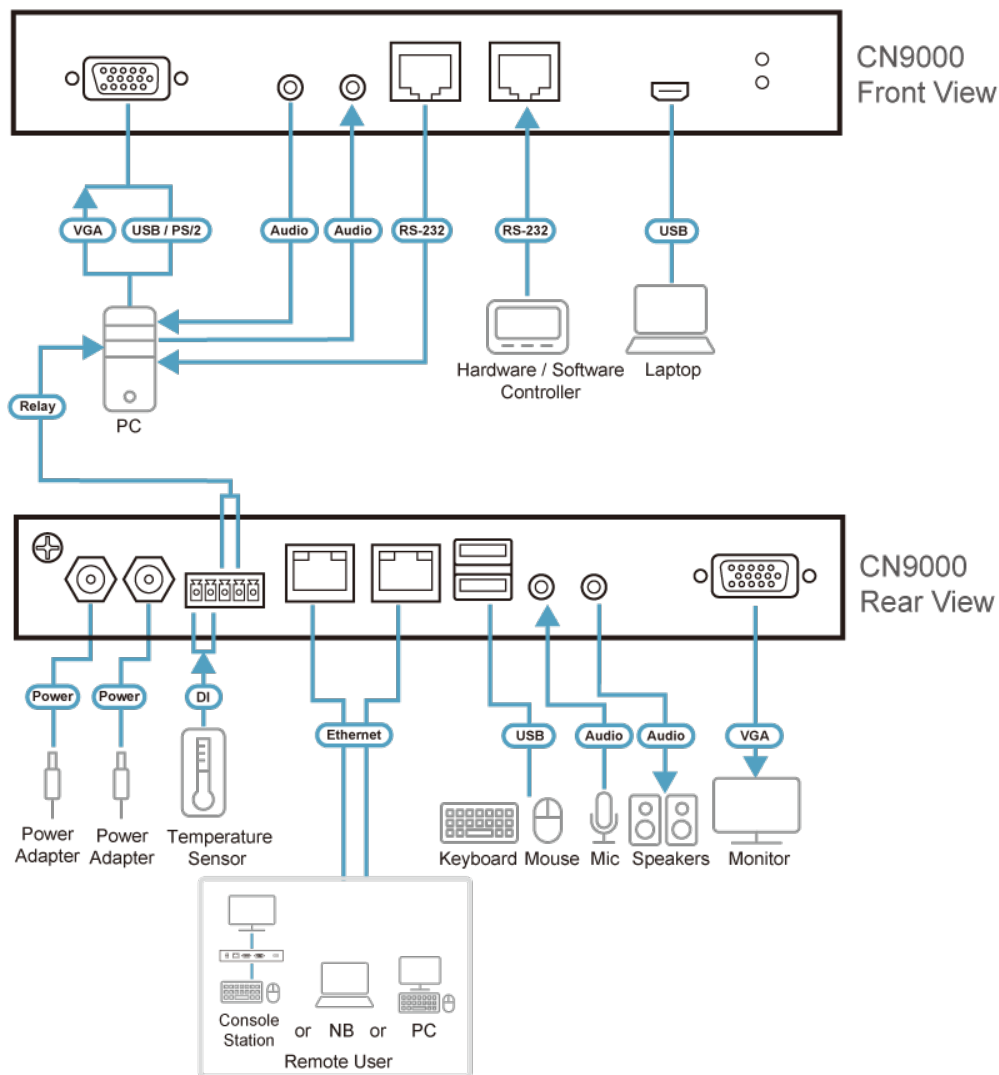
Virtual Remote Desktop

- Video quality and video tolerance can be adjusted to optimize data transfer speed; monochrome color depth, threshold and noise settings can be adjusted for compression of the data bandwidth in low bandwidth situations
- Full-screen video display or scalable video display
- Message Board for communication among remote users
- On-screen keyboard with multilanguage support
- Mouse DynaSync™ – automatically synchronizes the local and remote mouse movements
- Supports Exit Macros
- BIOS-level access

Specification

Connectors	
Console Ports	2 x USB Type A Female (White) 1 x VGA Female (Blue) 1 x Mini Stereo Jack Female (Green) 1 x Mini Stereo Jack Female (Pink)
KVM Ports	1 x SPHD Female (Yellow) 1 x Mini Stereo Jack Female (Green) 1 x Mini Stereo Jack Female (Pink)
LAN Ports	2 x RJ-45 Female
Virtual Media	1 x USB Mini-B Female
Power	2 x DC Jack
Serial	2 x RJ-45 Female
Control	1x PS/2 Female
Switches	
Reset	1 x Semi-recessed pushbutton (Black)
Emulation	
Keyboard / Mouse	USB, PS/2
LEDs	
Power	2 (Green)
Video	Local console - 1920 x 1200 @ 60 Hz Remote console - 1920 x 1200
Power Consumption	DC5V:7.46W:39BTU/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 - 50°C (CN9000) 0 - 40°C (Power Adapter)
Storage Temperature	-20 - 60°C
Humidity	0 - 80% RH, Non-condensing
Physical Properties	
Housing	Metal
Weight	0.86 kg (1.89 lb)
Dimensions (L x W x H)	20.00 x 15.41 x 2.85 cm (7.87 x 6.07 x 1.12 in.)
Note	For some of rack mount products, please note that the standard physical dimensions of WxDxH are expressed using a LxWxH format.

Diagram