1-Local/Remote Share Access Single Port 4K DisplayPort KVM over IP Switch

CN9950

The CN9950 KVM over IP Switch allows for remote access to digital video, audio and virtual media of a PC or workstation, supporting DisplayPort resolution up to 4K DCI (4096 x 2160 @ 30Hz) at both the local and remote consoles. Built with an advanced FPGA graphics processor, the CN9950 offers better image and video quality to enhance the user experience, while also meeting the RS-232 standards for serial control.

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 stable connectivity, the CN9950 is equipped with dual LAN and dual power functionality to keep operations in the server room smooth and efficient. Its power status detection function automatically sends out event notifications when the devices are offline (e.g. power failure) for device status monitoring. Moreover, the CN9950 features a 5-pin Relay / DI (digital input) terminal block allowing for remote reboot of the local server, and receiving digital input from a connected input/alarm device for notification of critical events.

For ease of remote management, the CN9950 WebClient Viewer supports remote desktop access without additional software applications. The DisplayPort 4K KVM over IP Switch provides a web-based GUI for remote access and management. In addition, a unified multi-language interface can minimize user training time and increase productivity.

The CN9950 is ideal for data centers, server rooms, and control rooms for remote access management in industries with requirements for high-quality images and multitasking, such as global organizations and companies with several office locations where it can function as a bridge between local and remote workplaces.

IP Ready	Remote UI	Shared Access		Console	Computers	DisplayPort	Virtual Media
TCP/IP	Browser	1 Local User	32 Remote Users	USB	USB		

Front View

Rear View

Features

Hardware

- Supports DisplayPort resolution up to 4K DCI (4096 x 2160 @ 30Hz) at both the local and remote consoles
- A mini USB port in the front panel can serve as a Virtual Media USB port or a Laptop USB Console (LUC) port
- Compact and slim design for space utility optimization
- Supports a 5-pin Relay/DI control terminal for environment monitoring
- Provides an FPGA graphics processor for better image quality and enhanced fps (frames per second) throughput for crisp video display response
- Two 10/100/1000 Mbps NICs for redundant LAN or two IP operation
- Dual power supply and dual LAN for backup
- Provides over IP capability to DisplayPort KVM switches without over IP functionality
- Allows access to the CN9950 via a built-in serial viewer, or via third-party software (such as PuTTY) for Telnet and SSH sessions

Management

- Complies to the RS-232 standards for serial control
- Up to 64 user accounts – up to 32 users can simultaneously share control
- Console access right management
- End session feature – administrators can terminate running sessions
- Event logging and Windows-based Log Server support
- Event logging – the CN9950 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
- Out of Band support – access the CN9950 through its serial port using a dial-up connection
- Local/Remote Share Mode conveniently grants shared or exclusive console privilege
- 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

Easy-to-Use Interface

- Browser-based and AP GUIs offer a unified multi-language 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

- Smart Card/CAC Reader support
- 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
- Flexible encryption design allows users to choose any combination of 56-bit DES, 168-bit 3DES, 256-bit AES, 128-bit RC4 or Random 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 multi-language support
- Mouse DynaSync™ – automatically synchronizes the local and remote mouse movements
- Supports Exit Macros
- BIOS-level access

Front View

Rear View
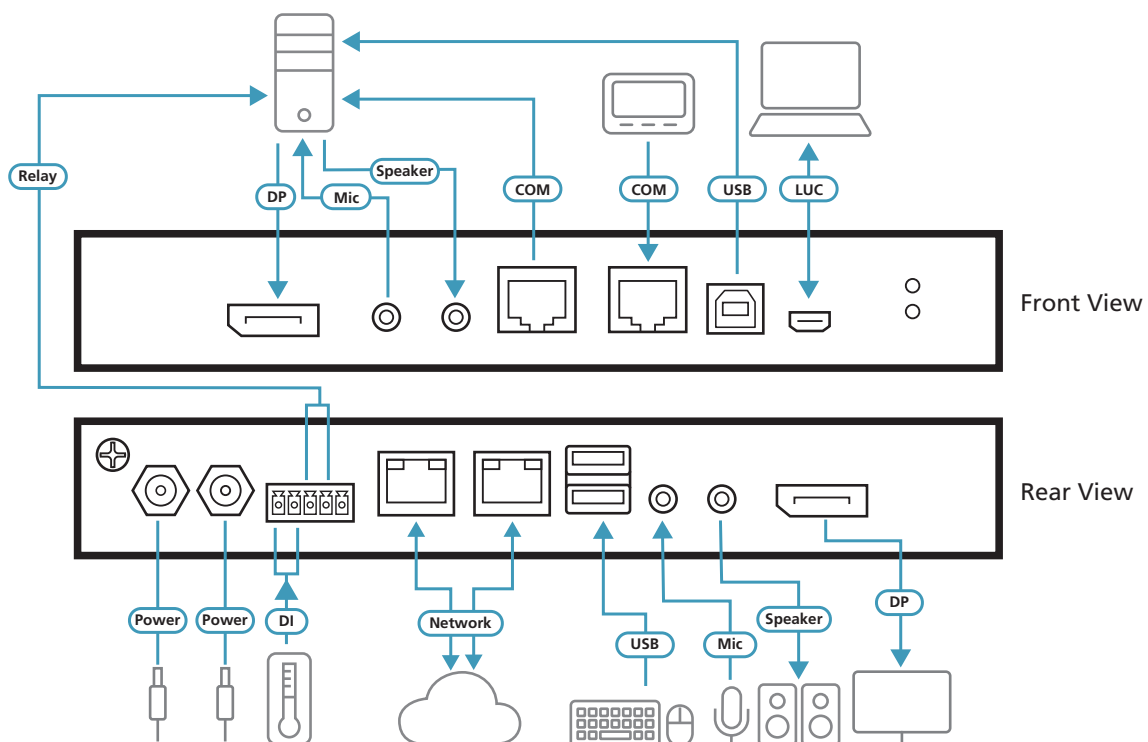
Highlights

Superior Visual Quality

4K DCI @30Hz DisplayPort Resolution

The CN9950 allows for remote access to digital video, audio, and virtual media of a PC or workstation, supporting DisplayPort resolution up to 4K DCI (4096 x 2160 @ 30Hz). It is equipped with an FPGA graphics processor, offering better image and video quality to enhance the user experience.
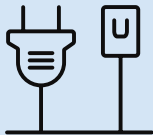
Security Guarded

Security Guarded Remote Access, Wherever You Are

The CN9950 provides a direct BIOS-level connection to the dedicated PC/server to allow instant remote access from different locations without requiring any extra software installation or configuration.

LAN/Power Redundancy

Dual LAN / Power Redundancy

The CN9950 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.

Virtual Media

Virtual Media Support for Prompt System Update

The CN9950 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

DI and Relay Connectivity for Contingency Approach

The CN9950 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.

Specifications

	CN9950
Connectors	
Console Ports	2 x USB Type A Female (White) 1 x DisplayPort Female (Black) 1 x Mini Stereo Jack Female (Green) 1 x Mini Stereo Jack Female (Pink)
KVM Ports	1 x USB Type B Female (white) 1 x DisplayPort Female (Black) 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
LEDs	
Power	2 (Green)
Video	Local console - 4096 x 2160 @ 30 Hz Remote console - 4096 x 2160
Power Consumption	DC5V:9.76W:50BTU
Environmental	
Operating Temperature	0 – 50 °C (CN9950) 0 – 40°C (Power Adapter)
Storage Temperature	-20 – 60 °C
Humidity	0 – 80% RH, Non-condensing
Physical Properties	
Housing	Metal
Weight	0.85 kg
Dimensions (L x W x H)	20.00 x 14.93 x 2.85 cm

Product information is subject to change without prior notice.

Released: 02/2021 V2.0