Simply Better Connections

KX9980R

5K DisplayPort Dual Display KVM over IP Receiver

The KX9980 5K DisplayPort Dual Display KVM over IP transmitter is a high-performance IP-based Dual Display transmitter, where the transmitter can transmit a computer's keyboard, video, mouse, and USB signals to the receiver for providing separate console accesses from both the transmitter's and receiver's locations. The setup allows extended access to computer systems via a USB dual DisplayPort console (USB keyboard, USB mouse, Dual DisplayPort monitors) over Intranet, enabling users to place the computers in secure and temperature-controlled environments, which may be isolated from the user workstation.

The KX9980 supports two DisplayPort video displays for delivering video resolutions of up to 5K (5120 x 2880 @ 30 Hz), and offers flawless and lossless video quality with zero latency. The KX9980 is equipped with one RJ-45 port and two SFP+ slots. 10-Gbps SFP+ fiber module expansions are supported for fiber optic network connections and a transmission distance of up to 10 km. For connection flexibility, both the KX9980 transmitter and receiver models can be connected either directly to each other or via a high-speed network over a copper-based or fiber-based LAN. The KX9980 also features dual power supply capability for power redundancy to ensure reliable service. The KX9980 can be set up at the workstation, mounted onto a wall or at the rear of a rack with its space-saving 0U rack-mount design.

As an IP-based matrix extender, the KX9980 can be installed in flexible configurations, including point-topoint, point-to-multipoint, multipoint-to-point, and multipoint-to-multipoint. When combined with the KVM over IP Matrix Manager (CCKM), it can be integrated into a KVM over IP matrix system (multipoint-tomultipoint) for providing more flexible applications in different working environments.

By integrating CCKM with KX9980, IT administrators can benefit from advanced features such as auto detection of all KX9980 devices on the same subnet for fast installation or configuration, username / password authentication and authorization, and the ability to define different types of connections that can be switched and shared. Security features of the KX9980 include 256-bit AES encryption for secured data transmissions, as well as RADIUS, LDAP, Active Directory, TACACS+ for third-party authentication services. In conclusion, the KX9980 offers the most convenient solution for providing full digital extension over a network for control room applications, such as air traffic control (ATC), traffic management centers, and broadcast distribution monitoring systems.

Note: The SFP+ module (2A-141G / 2A-142G) is sold separately. Contact your ATEN dealer for product information.

5K

Features

- Advanced Features[1]
  - Lossless video compression up to 5120 x 2880 for dual display, including UHD or DCI with zero latency
  - Native DP signal processing with color depth 24, 30, 36 bits
  - Supports Adobe RGB
  - Supports USB isochronous transfer to enable USB camera and USB speaker usage between transmitter and receiver
  - ATEN Matrix Link – allows users to instantly link transmitters and receivers to perform real-time port and profile switching on an iPad
  - Boundless Switching – simply move the mouse cursor across screen borders to switch between different receivers (Rx)
  - Fast Switching – switches between different remote video resolutions on a local display within 0.3 seconds
  - Push and Pull – share content instantly to / from a single Rx or video wall by just one click
  - Video walls – create multiple video walls with up to 12 x 12 (144 displays max.) in each layout
  - Advanced Scheduling – improve efficiency and save costs by allowing connections to be set based on time and date
  - Virtual Transmitter – independently stream video, audio, USB, and serial sources from different Tx
  - Internal and external authentication support – supports LDAP, Active Directory, RADIUS, and TACACS+
  - Advanced User Authorization Settings – administrators can set up to four access modes on Tx devices for collaboration or prevention of interference among users
  - Configurable user and group permissions for access and control of KX devices
  - Tx grouping of up to 4 sets of KX transmitters to support multi-display applications
  - Rx access control – users at the Tx local console can enable / disable Rx control privilege by simply pressing a control button

    Note:
    1. These advanced functions are supported when the KX transmitters are paired with KX receivers and managed by CCKM.
    2. The KVM over IP Access Control Box (2XRT-0015G) is sold separately. Contact your ATEN dealer for product information.

- Hardware
  - Support dual display with 32:9 ultra-wide resolution (combined) or two individual displays
  - Supports DisplayPort video resolutions – up to 5120 x 1440 @ 60 Hz (4:4:4), 5120 x 2880 @ 30 Hz (4:4:4), 4096 x 2160 @ 60 Hz (4:4:4), 1920 x 1080 @ 240 Hz (4:4:4) (CVT-RB), 2560 x 1440 @ 144 Hz (4:4:4) per display
  - DisplayPort 1.2 compliant
  - Stereo speakers and microphone support
  - High-speed USB Storage Transmission support
  - Auto-MDIX – automatically detects cable type
  - Built-in 8 kV / 15 kV ESD protection and 2 kV surge protection
  - Supports power redundancy – KX9980 has 2 DC jacks for power redundancy
  - Supports network failover – 1 RJ-45 & 2 SFP+ slots for network failover to ensure constant availability for missioncritical applications
  - Supports 10-Gbps SFP+ fiber module expansions for up to 10 km*
  - The housing meets IEC 60945 standards for maritime control room use and has passed environmental tests
  - Rack Mountable – Mounting options:
    – 2X-021G Dual Rack Mount Kit
    – 2X-031G Single Rack Mount Kit
  - Includes an industrial-grade power adapter – supports operating temperature of 0 – 50 °C to ensure durability and adaptability under harsh environmental conditions

    Note:
    *The SFP+ module (2A-141G / 2A-142G) is sold separately. Contact your ATEN dealer for product information.

- Management
  - Integration with KVM over IP Matrix Manager (CCKM) – a software enabling easy configurations of all KX devices with an intuitive web-based GUI
  - Dual console operation – controls user's system from both the transmitter's and receiver's keyboard, monitor, and mouse
  - OSD (On Screen Display) – enables configuration of both Tx / Rx devices on the receiver's display screen
  - EDID Expert ™ – selects optimum EDID settings to prevent video compatibility issue caused by different monitors
  - On-screen Preview (Panel Array ™Mode) – allows users to view the video of up to 36 displays on one screen
  - Video Compression Level – allows users to increase / decrease the video quality to adjust for appropriate network bandwidth
  - Command Line Interface – administrators can control all KX devices via RS-232 or Telnet by issuing commands or 3rdparty application
  - Supports hotkey commands
  - RS-232 serial ports – allows users to connect to a serial terminal for TextMenu, CLI, or to serial devices such as touch screens and barcode scanners
  - All KX Tx models are compatible to be used with all Rx models

- Security
  - Dedicated LAN port for KX direct connections – can be isolated from the corporate network
  - Secured data transmission – 256-bit AES encryption for all data being transmitted from the transmitter to the receiver
  - Supports industry standard Transport Layer Security (TLS) protocol

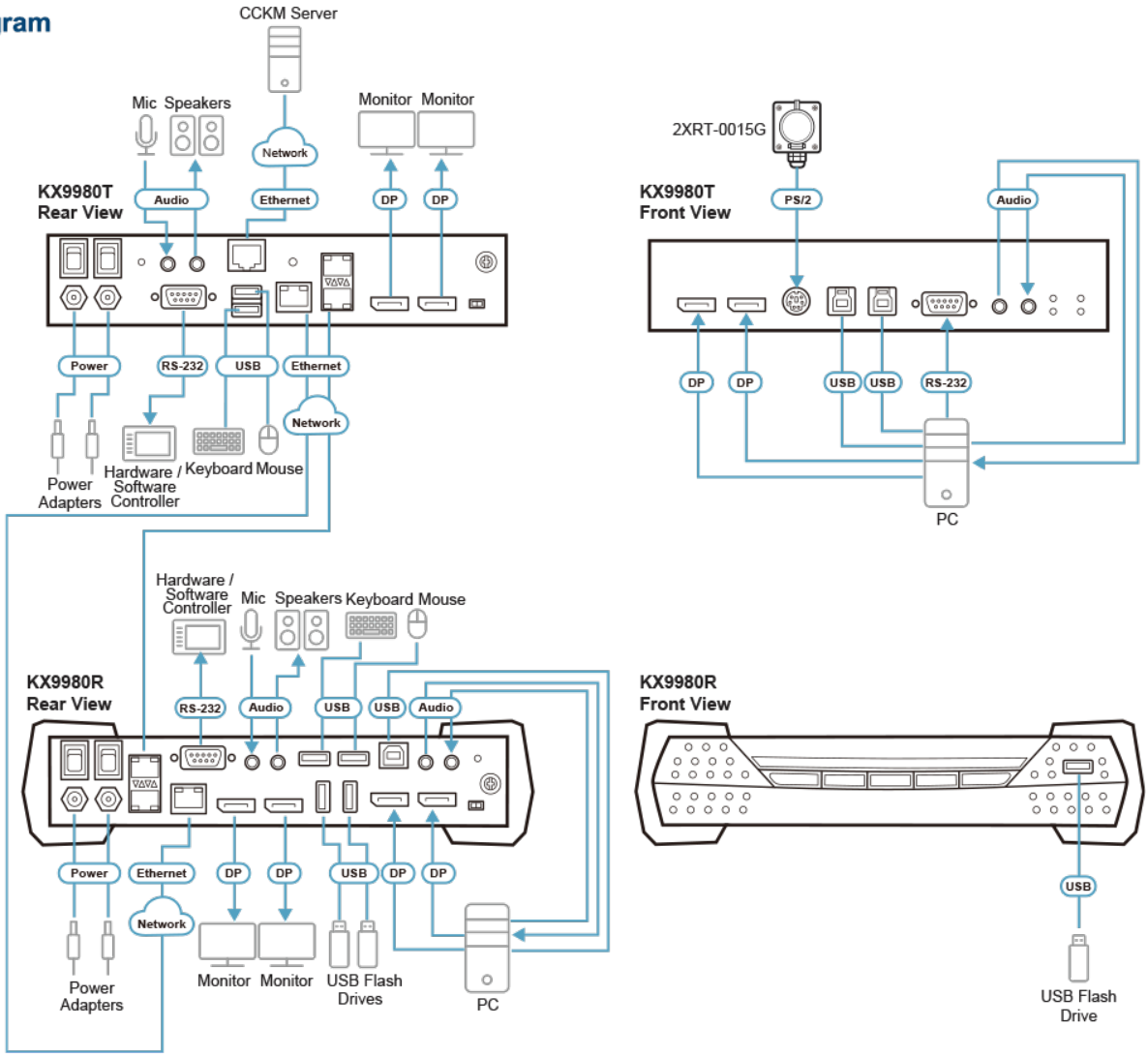
- Virtual Media
  - Virtual Media mode enhances data transmission performance, and is ideal for file transfers, OS patching, software installations and diagnostic testing
  - Supports USB 2.0 DVD / CD drives, USB mass storage devices, PC hard drives and ISO images
  - Supports smart card / CAC reader

Specification

Connectors	
USB Port	2 x USB Type A Female (White)
Console Ports	2 x USB Type A Female (Blue) 1 x USB Type A Female (White) 2 x DisplayPort Female (Black) 1 x Mini Stereo Jack (Green) 1 x Mini Stereo Jack (Pink) 1 x DB-9 Male (Black)
Computer Ports	*Computer ports for future enhancements 1 x USB 2.0 Type B Female (white) 2 x DisplayPort Female (Black) 2 x Audio Jack Female (Pink for Mic., Green for Ear Phone, Front Panel)
Power	2 x DC Jack (Black)
LAN Ports	1 x RJ-45 (Black) 2 x SFP+ Slot
Switches	
OSD	1 x Pushbutton
Port (Up)	1 x Pushbutton
Port (Down)	1 x Pushbutton
Reset	1 x Semi-recessed Pushbutton
LEDs	
1000/10000 Mbps	1 (1000: Orange / 10000: Green)
Power	2 (Green)
Local	1 (Green)
Remote	1 (Green)
Emulation	
Keyboard / Mouse	USB
Power Consumption	DC12V:33W:237BTU/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.
Video Resolution	Up to Dual-Display: 5120 x 2880 @ 30Hz, 5120 x 1440 @ 60Hz, 4096 x 2160 @ 60Hz, 2560 x 1440 @ 144hz, 1920 x 1080 @ 240Hz
Latency	< 1ms
Environmental	
Operating Temperature	0–50°C
Storage Temperature	-20–60°C
Humidity	0–95% RH, Non-condensing
Physical Properties	
Housing	Metal
Weight	1.69 kg (3.72 lb)
Dimensions (L x W x H)	22.60 x 22.40 x 5.30 cm (8.9 x 8.82 x 2.09 in.)
Note	For some of rack mount products, please note that the standard physical dimensions of WxDxH are expressed using a LxWxH format.

Diagram

Diagram



ATEN International Co., Ltd.
3F., No.125, Sec. 2, Datong Rd., Sijhih District., New Taipei City 221, Taiwan
Phone: 886-2-8692-6789 Fax: 886-2-8692-6767
www.aten.com E-mail: marketing@aten.com