Simply Better Connections

KE9950T

4K DisplayPort Single Display KVM over IP Transmitter

The KE9950 4K DisplayPort Single Display KVM over IP Extender consists of a high performance IP-based transmitter KE9950T that connects to the computer and receiver KE9950R that provides console access from a separate location. The KE9950 allows access to a computer system from a remote USB console (USB keyboard, USB mouse, DisplayPort monitor) over an intranet, enabling users to locate computers in a secure and temperature controlled environment, which is isolated from users' workstation.

The KE9950 / KE9952 supports one DisplayPort display at each end, providing video resolutions up to 3840 x 2160 @ 30 Hz(4:4:4) as well as flawless and lossless video compression quality with zero latency.

The KE9950 supports connections via an RJ-45 port or a SFP slot, as well as provides dual power supplies for redundancy. The transmitter and receiver can be connected either directly to each other or via a high-speed network, over a copper-based or fiber-based LAN, ensuring 24/7 availability of remote access to servers. To connect via the SFP slot, the extender supports 1Gbps SFP fiber module[1] expansions, enabling connections via fiber optic network to extend transmission distances up to 10km.

The KE9950 can be set on a desk, mounted on a wall or at the rear of a rack with its space-saving 0U rack-mount design. As an IP-based matrix extender, the KE9950 can be used as a point-to-point / point-to-multipoint / multipoint-to-point / multipoint-to-multipoint extender, or integrated into a KVM over IP Matrix System (multipoint-to-multipoint) when combined with CCKM, providing more flexible applications in different working environments.

When integrated with the CCKM, the KE9950 supports more advanced features such as boundless switching, "Push" and "Pull", video wall and multi-display setups, and profile scheduling that provide uninterrupted access with quick and easy control tools to use the KE9950 over a network.

More functions include auto detection of all KE Series extenders [2] in the same subnet for the sake of 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 also provide extra protection, supporting AES encryption for secured data transmissions, while RADIUS, LDAP, AD or remote user authentication provides an added layer of connection security; moreover, with an OSD, RS-232 support, and Auto MDIX, the KE9950 is the most cost-effective and convenient way to get a full digital extension from anywhere on the intranet.

Whether you're monitoring, operating, controlling or extending computer access, the KVM over IP Matrix System is made adaptable, to fit an endless variety of working environments and workstation settings, to provide solutions in traffic management centers, retail surveillance centers, facility situation rooms, command control centers, utilities process control centers, broadcasting distribution monitoring systems, network operations centers (NOC), and many other industries where matrix extending is required.

Note:
1. The SFP module (2A-136G / 2A-137G) is sold separately. Contact your ATEN dealer for product information.
2. Refer to www.aten.com for more about the KE Series extenders. For the latest list of compatible network switches, please visit: ATEN Support Center for more information.

Features

- Advanced Features[1]
  - ATEN Matrix Link – allows users instant link transmitters and receivers, and perform real-time port and profile switching on an iPad
  - Boundless Switching - simply moves the mouse cursor across screen boundaries 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” – shares content instantly to/from a single Rx or video wall by just one click
  - Video Walls – creates multiple video walls with up to 12 x 12 (144 displays max.) in each layout
  - Flexible connections – allows multiple extender and matrix connections for multi-display installations and video wall applications
  - On-screen Preview (Panel Array™ Mode) – allows users to view the video of up to 36 displays on one screen
  - Advanced Scheduling – improves efficiency and saves costs by allowing connections to be set based on time and date
  - Channel connections allow RX devices to connect to multiple TX devices – to stream video, audio, USB and serial sources independently
  - Virtual Transmitter – independently streams video, audio, USB, and serial sources from different Tx
  - Internal and external authentication support – supports LDAP, Active Directory, RADIUS and TACACS+ external authentications
  - Advanced user authorization settings – administrators can set four access modes of permissions on Tx devices for collaboration or to avoid interference among users
  - Video grouping of up to 4 sets of KE series devices to support Multi-Display applications
  - Configurable user and group permissions for access and control of KVM over IP extenders
  - Rx access control – users at the Tx local console can enable / disable Rx access by simply pressing a control button [2]

    Note:
    1. These advanced functions are supported when the KE transmitters are paired with KE 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
  - The housing meets IEC 60945 standards for maritime control room use and has passed environmental tests
  - Supports power / network failover – dual DC jacks for power redundancy and 1 RJ-45 & 1 SFP fiber ports for network failover to ensure constant availability for mission-critical applications
  - Supports 1Gbps SFP fiber module expansions up to 10 km [1]
  - Advance processor provides lossless and zero latency video transmissions up to 3840 x 2160 @ 60 Hz (4:2:0), 3840 x 2160 @ 30 Hz (4:4:4); 8-bit RGB (24-bit total color)
  - Support 32:9 ultra-wide resolution
  - Audio enabled – supports stereo speakers and microphone
  - High speed USB storage transmission support
  - Auto-MDIX – automatically detects cable type
  - Built-in 8KV / 15KV ESD protection and 2KV surge protection
  - Fanless design for silent operations that are energy efficient
  - 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°C – 50°C to ensure durability and adaptability under harsh environmental conditions

    Note:
    1. The SFP module (2A-136G / 2A-137G) is sold separately. Contact your ATEN dealer for product information.

- Management
  - Centralized management software – KVM over IP Matrix Manager (CCKM) allows users to easily administrator all KE devices with an intuitive web-based GUI
  - Dual console operation – controls your system from both the transmitter’s and receiver’s keyboard, monitor, and mouse consoles
  - OSD (On Screen Display) on the Receiver configures both units
  - EDID Expert™ – selects optimum EDID settings for smooth power-up and highest quality display
  - Four selectable access modes for multiple simultaneous access(Exclusive / Occupy / Share / View only mode) – administrators can select access modes of permissions on Tx devices to boost collaboration or to avoid interference among users
  - Command line interface – administrators can control all KVM over IP extenders via RS-232 or TCP / IP using a CLI or 3rd party application
  - RS-232 serial ports – allow users to connect to a serial terminal for TextMenu, CLI, or serial devices such as touch screens and barcode scanners
  - Supports Hotkey Commands
  - Flashing LED and beeping features help locate and identify devices
  - Video Compression Level – allows users to increase / decrease the video quality to adjust for appropriate network bandwidth
  - Compatible with all KE devices

- Security
  - Dedicated LAN port for KE direct connections – can be isolated from the corporate network
  - Secure data transmission – AES 128-bit encryption to secure all data before it’s transmitted over a network and decrypts the data on the receiver
  - Supports industry standard Transport Layer Security (TLS) protocol

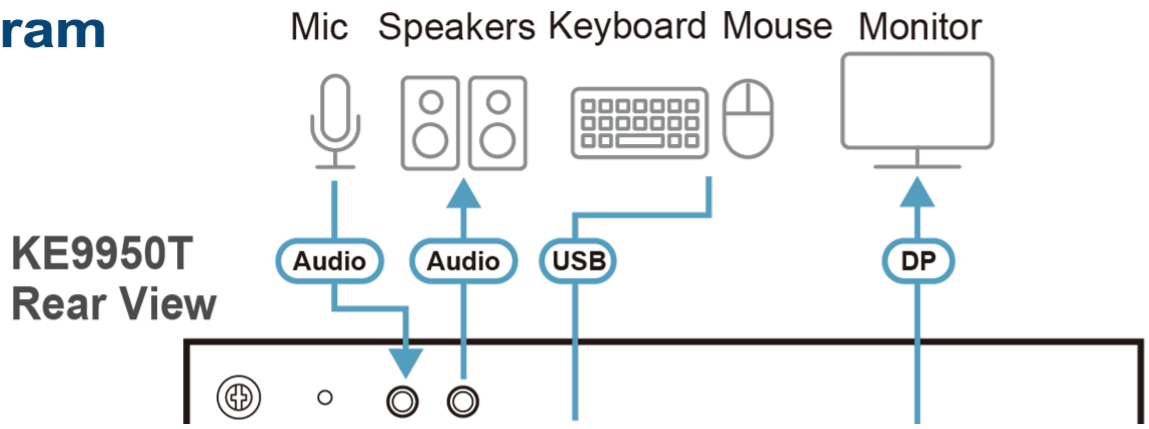
- Virtual Media
  - USB Storage Transmission mode enhances data transmission performance, ideally for file transfers, OS patching, software installations and diagnostic testing
  - Supports USB 2.0 DVD / CD drives, USB mass storage devices, PC hard drives and ISO images
  - Supports Smart Card / CAC Reader

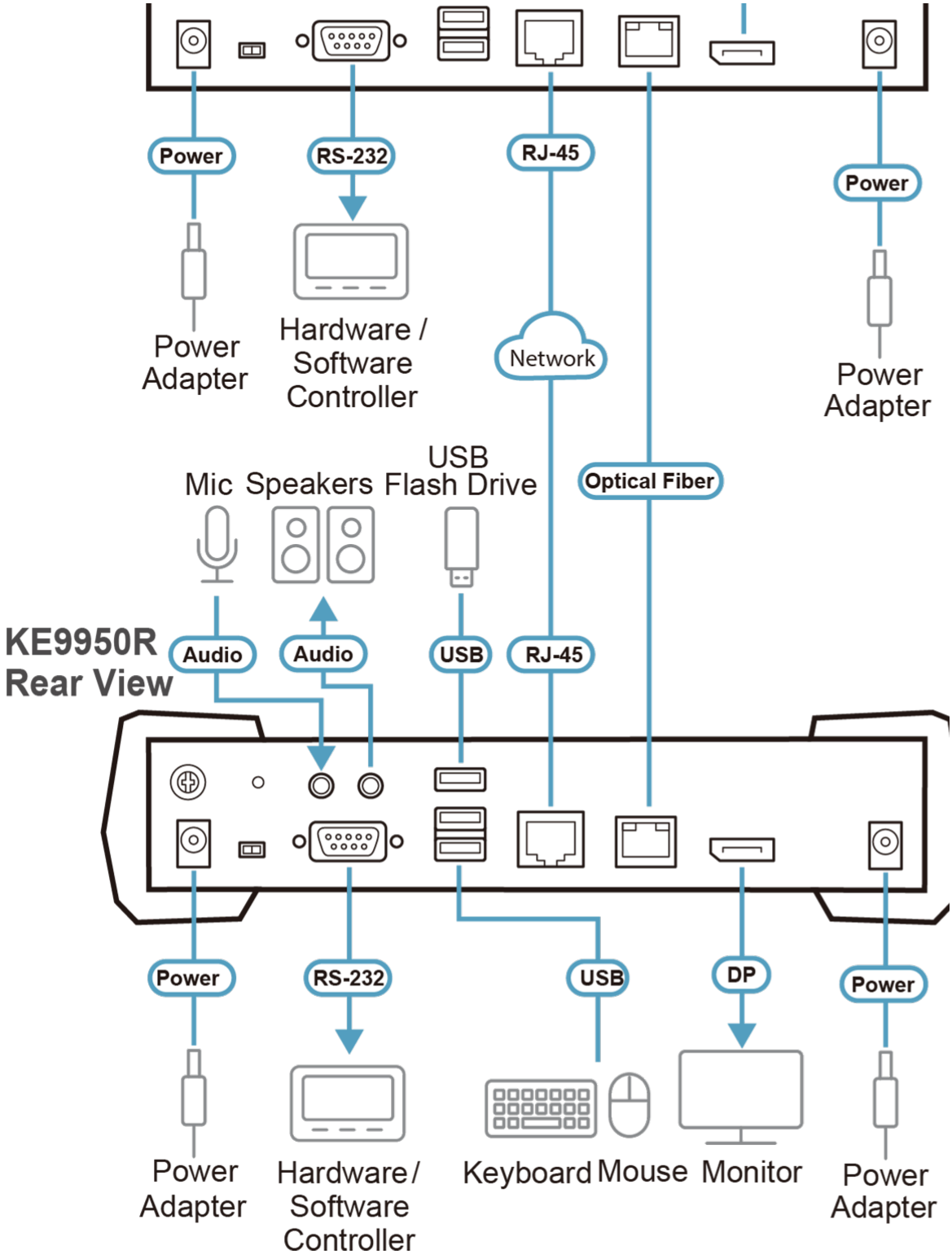
Specification

Connectors	
Console Ports	2 x USB Type A Female (White) 1 x DisplayPort Female (Black) 1 x Mini Stereo Jack (Green) 1 x Mini Stereo Jack (Pink) 1 x DB-9 Male (Black)
KVM Ports	1 x USB Type B Female (White) 1 x DisplayPort Female (Black) 1 x Mini Stereo Jack (Green) 1 x Mini Stereo Jack (Pink) 1 x DB-9 Female (Black)
Power	2 x DC Jack (Black)
LAN Ports	1 x RJ-45 (Black) 1 x SFP Slot
Switches	
OSD	N/A
Video	N/A
Graphics	N/A
Reset	1 x Semi-recessed Pushbutton
LEDs	
10/100/1000 Mbps	1 (10: Orange / 100: Orange & Green / 1000: Green)
Power	1 (Blue)
Local	1 (Green)
Remote	1 (Green)
Emulation	
Keyboard / Mouse	USB
Power Consumption	DC5V:9.51W:49BTU/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 3840 x 2160 @ 30Hz
Latency	< 5ms
Environmental	
Operating Temperature	0–50°C
Storage Temperature	-20–60°C
Humidity	0–95% RH, Non-condensing
Physical Properties	
Housing	Metal
Weight	1.12 kg (2.47 lb)
Dimensions (L x W x H)	21.50 x 16.29 x 4.18 cm (8.46 x 6.41 x 1.65 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

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