

### **KE9952**

4K DisplayPort Single Display KVM over IP Extender with PoE



The KE9952 4K DisplayPort Single Display KVM over IP Extender consists of a high performance IP-based transmitter KE9952T that connects to the computer and receiver KE9952R that provides console access from a separate location. The KE9952 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 KE9952 supports one DisplayPort display at each end, providing video resolutions up to 3840 x 2160 @30Hz (4:4:4) as well as flawless and lossless video compression quality with minimal latency.

The KE9952 supports connections via an RJ-45 port or a SFP slot. 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\* expansions, enabling connections via fiber optic network to extend transmission distances up to 10km.

In addition, the KE9952 features Power over Ethernet (PoE) function, the power can be supplied through a PoE Network Switch; therefore, eliminating the need for a power adapter and effectively reducing the power configuration cost.

The KE9952 can be set on a desk, mounted on a wall or at the rear of a rack with its spacesaving 0U rack-mount design. As an IP-based matrix extender, the KE9952 can be used as a point-to-point / point-to-multipoint-to-point / multipoint-to-point / multipoint-to-multipoint extender, or integrated into a KVM over IP Matrix System (multipoint-to-multipoint) when combined with the KE Matrix Management Software (CCKM), providing more flexible applications in different working environments.

When integrated with the KE Matrix Management Software, the KE9952 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 KE9952 over a network.

More functions include auto detection of all KE Series extenders\*\* 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 KE9952 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.

 $^{\star}$ The SFP module ( $\underline{2A-136G}$  /  $\underline{2A-137G}$ ) is sold separately. Contact your ATEN dealer for product information.

\*\*Refer to www.aten.com for more about the KE Series extenders





#### Features

#### Advanced Features\*

- ATEN Matrix Link allows you instant link transmitters and receivers, and perform real-time port and profile switching on an iPad
- Boundless Switching simply move the mouse cursor across screen boundaries to switch between different receivers (Rx)
- "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 8 x 8 (64 displays max.) in each layout
- Advanced Scheduling improves efficiency and saves costs by allowing connections to be set based on time and date
- Virtual Transmitter independently streams video, audio, USB, and serial sources from different Tx Support both internal and external authentication external authentication supports LDAP, Active Directory, RADIUS and TACACS+
- Advanced User Authorization Settings administrators can set four access modes of permissions on Tx devices for collaboration or to avoid interference among users
- Configurable user and group permissions for access and control of KE devices
- Tx grouping of up to 4 sets of KE transmitters to support multi-display applications
- Rx access control users at the Tx local console can enable / disable Rx access by simply pressing a control button\*\*

  \*These advanced functions are supported when the KE transmitters are paired with KE receivers and managed by KE Matrix Management Software ( <a href="CCKM">CCKM</a>)

  \*\*The KVM over IP Access Control Box (<a href="22XRT-0015G">22XRT-0015G</a>) is sold separately. Contact your ATEN dealer for product information.

#### Hardware

- Supports DisplayPort video resolutions up to 3840 x 2160 @30Hz (4:4:4) 36-bit color depth
- Supports digital video output
- Compliant with DP 1.2 and HDCP 1.3
  Supports stereo speakers and stereo 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
- Supports connection via Gigabit Ethernet port (RJ-45) or SFP port for failover
- Support 1Gbps SFP fiber module expansions\*\*\*up to 10 km
- Power Redundancy DC Jack + PoE
- Support Power over Ethernet (PoE) function compliant with the IEEE 802.3at standard
- Rack Mountable Mounting options:
- 2X-021G Dual Rack Mount Kit
- 2X-031G Single Rack Mount Kit
- Recommended Network Switches:

Below are the network switches that have passed ATEN's stress tests using the KE Series extenders. Our tests streamed content over a network with a resolution of 1920 x 1200 @60Hz (KE69 Series) and 3840 x 2160 @30Hz (KE89, KE99 Series), 24bit color depth at 60 frames per second.

- ATEN ES0152 / ES0152F
- Cisco Catalyst 2960X / Catalyst 2960XR / Catalyst 3750
- HP Procurve 2920
- H3C S5120
- Huawei S5700 DLink DGS-1510
- Please refer to the FAQ link below on how to select network switches and network switch information collected by ATEN Customer Service Division, where the collected information includes customer's feedback from their actual experience in using and installing the product(s). https://eservice.aten.com/eServiceCx/Common/FAQ/view.do?id=6276

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

### Management

- Centralized KE Series management software KE Matrix Management Software ( 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
- Local console for emergency operation
- OSD (On Screen Display) on the Receiver configures both Tx / Rx devices
- EDID Expert™ selects optimum EDID settings to prevent video compatibility issue caused by different monitors
- On-screen Preview allows users to view the video of up to 36 displays on one screen
- Video Compression Level allows you to increase/decrease the video quality to adjust for appropriate network bandwidth
- CLI administrators can control all KE devices via RS-232 or Telnet by issuing commands
  RS-232 serial ports allow you to connect to a serial terminal for TextMenu, CLI, or serial devices such as touch screens and barcode scanners
- Compatible with all KE devices

### Security

- Dedicated LAN port for KE direct connections can be isolated from the corporate network
- Secure data transmission 128-bit AES 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

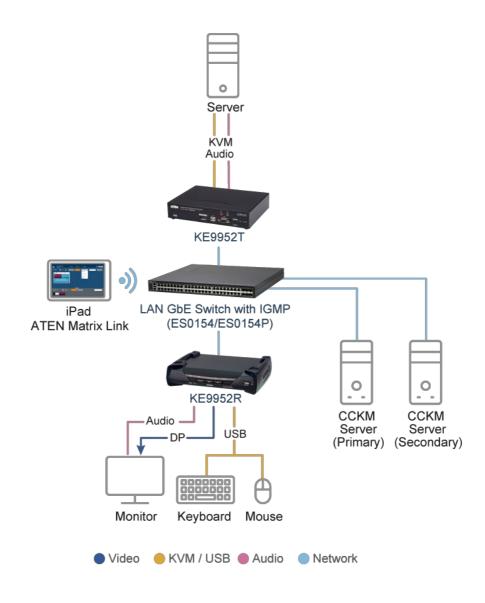


# Specification

Function	KE9952R	KE9952T
Connectors		
USB Port	2 x USB Type A Female (White)	N/A
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)	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	N/A	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	1 x DC Jack (Black)	1 x DC Jack (Black)
LAN Ports	1 x RJ-45 (Black, PoE) 1 x SFP Slot	1 x RJ-45 (Black, PoE) 1 x SFP Slot
Switches		
OSD	1 x Pushbutton	N/A
Video	1 x Pushbutton	N/A
Graphics	1 x Pushbutton	N/A
Reset	1 x Semi-recessed Pushbutton	1 x Semi-recessed Pushbutton
LEDs		
10/100/1000 Mbps	1 (10: Orange / 100: Orange & Green / 1000: Green)	1 (10: Orange / 100: Orange & Green / 1000: Green)
Power	1 (Blue)	1 (Blue)
Local	1 (Green)	1 (Green)
Remote	1 (Green)	1 (Green)
Emulation		
Keyboard / Mouse	USB	USB
Power Consumption	POE:10.04W:73BTU  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.	POE:11.88W:60BTU  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	Up to 3840 x 2160 @ 30Hz
Environmental		
Operating Temperature	0–50°C	0–50°C
Storage Temperature	-20–60°C	-20-60°C
Humidity	0–95% RH, Non-condensing	0–95% RH, Non-condensing
Physical Properties		
Housing	Metal	Metal
Weight	1.27 kg ( 2.8 lb )	1.15 kg ( 2.53 lb )
Dimensions (L x W x H)	22.75 x 17.16 x 5.48 cm (8.96 x 6.76 x 2.16 in.)	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



## 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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