

2K DVI-D Dual Link KVM over IP Extender 2K DVI-D Dual Link KVM over IP Extender with PoE KE6910 / KE6912

The KE6910 / KE6912 2K DVI-D Dual Link KVM over IP Extender consists of a high performance IP-based transmitter (KE6910T / KE6912T) that connects to the computer and receiver (KE6910R / KE6912R) that provides console access from a separate location. The KE6910 / KE6912 allows access to a computer system from a remote USB console (USB keyboard, USB mouse, DVI monitor) over an intranet, enabling users to locate computers in a secure and temperature controlled environment, which is isolated from users' workstation.

The KE6910 / KE6912 supports one DVI display at each end, providing video resolutions up to 2560 x 2048 @ 50 Hz and flawless and lossless video compression quality with zero latency. The extender also supports 2K x 2K video resolution (2048 x 2048 @ 60Hz), which is used widely in the Air Traffic Control (ATC) industry.

Both KE6910 and KE6912 support 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 module¹ expansions, enabling connections via fiber optic network to extend transmission distances up to 10 km.

The KE6910 also provides dual power supplies for redundancy. Meanwhile, the KE6912 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 KE6910 / KE6912 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 a KVM over IP extender, the KE6910 / KE6912 can be used as a point-to-point / point-to-multipoint / multipoint-to-point extender, or integrated into a KVM over IP Matrix System (multipoint-to-multipoint) when combined with the CCKM providing more flexible applications in different working environments.

When integrated with the CCKM, the KE6910 / KE6912 supports more advanced features such as Authentication Lock, Connection Redundancy, Disconnection Alert, 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 KE6910 / KE6912 over a network.

More functions include auto detection of all the KVM over IP extenders² 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 KE6910 / KE6912 is the most cost-effective and convenient way to get a full digital extension from anywhere on the intranet.

Whether users are 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 ATC (Air Traffic Control) centers, 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 a list of the KVM over IP extenders.

KE6910R / KE6910T Front View



KE6912R / KE6912T Front View



KE6910R / KE6910T Rear View



KE6912R / KE6912T Rear View



Features

Exclusive Features for ATC Industry¹

- Supports 2K x 2K video resolution (2048 x 2048 @ 60 Hz)
- Boundless Switching – simply move the mouse cursor across screen boundaries to switch between different receivers (Rx)
- Fast Switching – 0.3-second switching between transmitter-connected servers of any resolution
- “Push” and “Pull” – shares content instantly to / from a single Rx or video wall by just one click
- Authentication lock – automatically logs in when the power of the system is resumed after power off
- Connection redundancy – automatically connects to another transmitter (Tx) after disconnection with the original Tx, ensuring constant access to servers
- Disconnection alert – pop-up warning message and looping alarm beeping notify users the disconnection status
- Supports power / network failover – ensures constant availability for mission-critical applications (2 DC jacks for KE6910 and 1 DC jack+PoE for KE6912; 1 RJ-45 and 1 SFP fiber for network failover)

Advanced Features¹

- ATEN Matrix Link – allows users instant link transmitters and receivers, and perform real-time port and profile switching on an iPad
- 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 streams 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 button²

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 1Gbps SFP fiber module expansions up to 10 km¹
- Advance processor provides lossless and zero latency video transmissions up to 2560 x 2048 @ 50Hz, 2560 x 1600 @ 60Hz; 8-bit RGB (24-bit total color)
- 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 the user's 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 – allows 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 transmitted over a network and decrypts the data on the receiver
- Supports industry standard Transport Layer Security (TLS) protocol

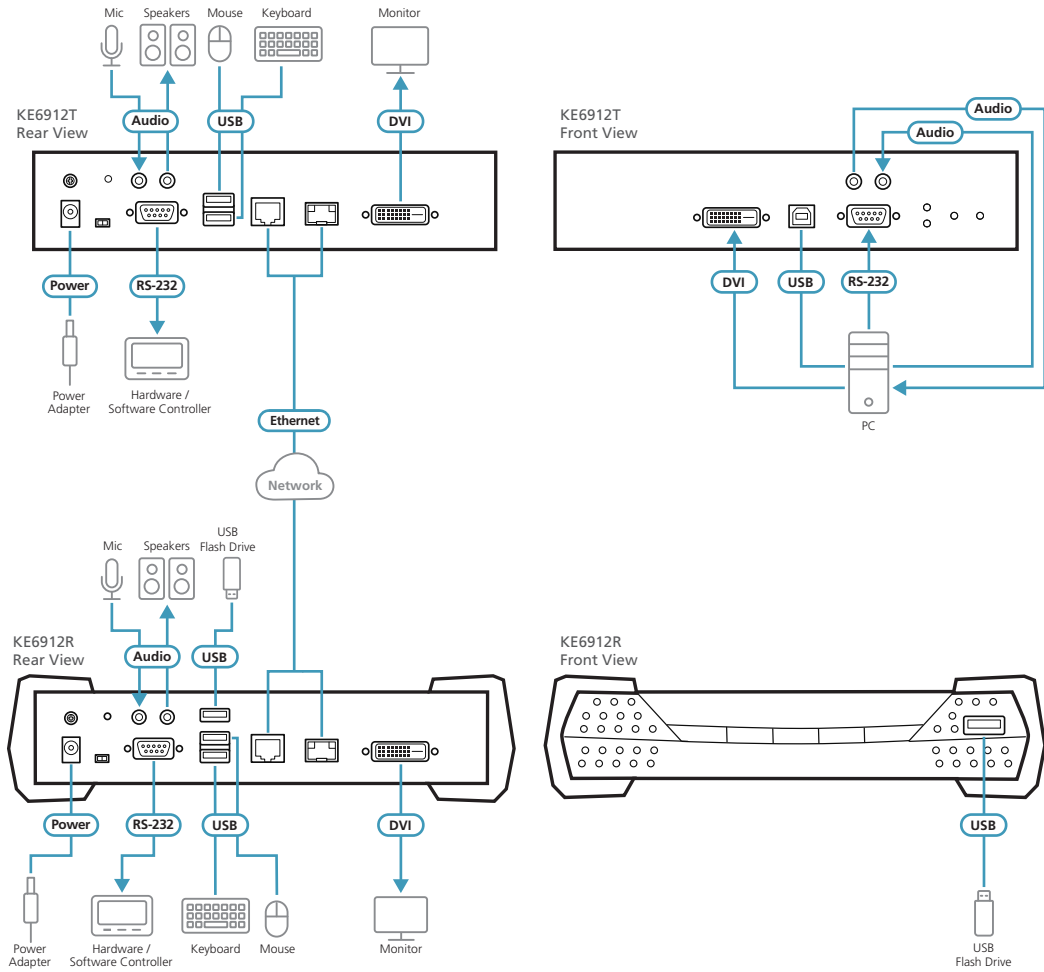
Virtual Media

- 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

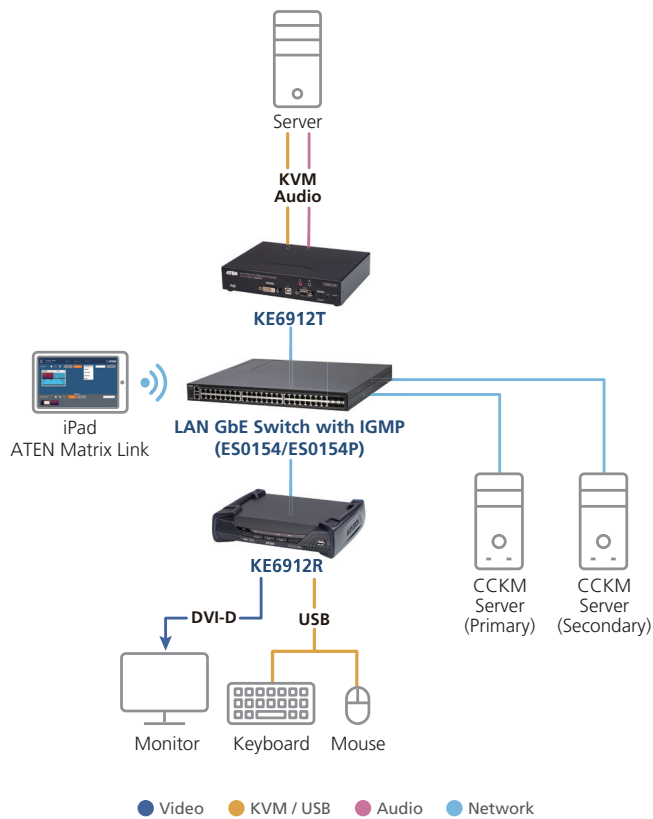
Highlights

<p>Over IP</p>	<p>The KE6910 / KE6912 extends a computer's KVM console to any distance over a LAN by connecting the Tx and Rx units to users network. The extender also extend a computer's KVM console up to 100 m by directly connecting the Tx and Rx units with a single Cat 5e / 6 cable. Standard IP protocols ensure maximum compatibility with your existing IT infrastructure and staff skill set.</p>
<p>Superior Video Quality</p>	<p>ATEN's advanced graphics processor delivers video that ensures you to experience the same vivid and sharp image quality on the remote monitor no matter how far away the console is located. The KE6910 / KE6912 supports DVI-D Dual Link video resolutions up to 2560 x 2048 @50 Hz, including resolutions of 2560 x 1600 @60 Hz and 2K x 2K (2048 x 2048 @60 Hz).</p>
<p>Redundancy</p>	<p>The KE6910 / KE6912 supports connection via Gigabit Ethernet port (RJ-45) or SFP port for failover. Besides, the KE6910 supports dual power and the KE6912 features Power over Ethernet (PoE) for redundant power supply. For KE6912, 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.</p>
<p>SFP Module</p>	<p>The KE6910 / KE6912 supports 1Gbps SFP fiber module expansions, enabling connections with network switch which allow inserting either an optical Fiber Channel SFP module or Active Copper SFP module. The single-mode SFP module provides 1GbE connectivity up to 10km while the multi-mode SFP module provides 1GbE connectivity up to 550m. Note: The SFP module (2A-136G / 2A-137G) is sold separately. Contact your ATEN dealer for product information.</p>
<p>Advanced Management System</p>	<p>The KVM over IP Matrix Manager (CCKM) allow users to easily administer all KVM over IP extenders over a network, using an intuitive user-friendly web based GUI.</p>
<p>Boundless Switching</p>	<p>The extender simply moves the mouse cursor across screen boundaries to switch between different receivers. The function expedites the process of switching between receivers for a smooth and hassle-free user experience and enables immediate monitoring and management of receivers. Note: These advanced functions are supported when the KE transmitters are paired with KE receivers and managed by CCKM.</p>
<p>Flexibility</p>	<p>The KE6910 / KE6912 allow users to access, share, and switch full control of Tx connected computers - from any Rx (KVM console) on the network. The extender also allows One-to-One, One-to-Many, Many-to-One, or Many-to-Many computer to KVM console connections.</p>
<p>Enhanced Security Features</p>	<p>The KE6910 / KE6912 compliant with universal enterprise grade security standards (AES encryption to secure Video / Keyboard / Mouse / Data transmission and Transport Layer Security (TLS) protocol), and provides different levels of username / password authentication and authorization.</p>

KE6912 Diagram



Scenario Diagram



Specifications

	KE6910R	KE6912R	KE6910T	KE6912T
Connectors				
USB Ports	2 x USB Type-A Female (White)		N/A	
Console Ports	2 x USB Type-A Female (White) 1 x DVI-D Female (White) 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 DVI-D Female (White) 1 x Mini Stereo Jack (Green) 1 x Mini Stereo Jack (Pink) 1 x DB-9 Female (Black)	
Power	2 x DC Jack (Black)	1 x DC Jack (Black)	2 x DC Jack (Black)	1 x DC Jack (Black)
LAN Ports	1 x RJ-45 (Black) 1 x SFP Slot	1 x RJ-45 (Black, PoE) 1 x SFP Slot	1 x RJ-45 (Black) 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			
Mode Selection	1 x Slide Switch (Extension, RS-232 Config)		1 x Slide Switch (Auto, RS-232 Config/Access Control, Local)	
LEDs				
10 / 100 / 1000 Mbps	1 (10: Orange / 100: Orange & Green / 1000: Green)			
Power	1 (Blue)			
Local	1 (Green)			
Remote	1 (Green)			
Video Resolution	Up to 2560 x 2048 @ 50Hz, 2560 x 1600 @ 60Hz			
Latency	< 5ms			
Emulation				
Keyboard / Mouse	USB			
Power Consumption	DC 5 V: 9.02 W	POE: 11.27W	DC 5 V: 10.02 W	POE: 12.53W
Environmental				
Operating Temperature	0 – 50 °C			
Storage Temperature	-20 – 60 °C			
Humidity	0 – 95% RH, Non-condensing			
Physical Properties				
Housing	Metal			
Weight	1.26 kg	1.28 kg	1.13 kg	1.17 kg
Dimensions (L x W x H)	22.75 x 17.16 x 5.48 cm		21.5 x 16.33 x 4.18 cm	

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