KE6910 Air Traffic Control Bundle Solution

KE6910 ATC

ATEN KE6910 Air Traffic Control Bundle Solution consists of two high performance IP-based transmitters (KE6910T) that connect to two PCs / servers and an IP-based receiver (KE6910R), providing console access from a separate location. The solution builds effortless IP extension that eliminates the distance restrictions of control room management, enabling a faster response to mission-critical data center emergencies. With Primary-Secondary Architecture, the KE6910 Air Traffic Control Bundle Solution enables connection to a primary and a secondary computer that allows instant system failover via hotkey switching without moving around workstations. The deployment of ATEN KE6910 Air Traffic Control Bundle Solution allows access to a computer system from a remote USB console (USB keyboard / mouse and DVI monitor) over the intranet, allowing the computer to be located in a secure and temperature controlled environment, which is also isolated from the user workstation.

KE6910T / KE6910R features one DVI display at each end, providing video resolutions up to 2560 x 2048 @ 50 Hz / 2560 x 1600 @ 60 Hz as well as flawless and lossless video compression quality with extremely low latency. KE6910T and KE6910R both support connections via an RJ-45 port or a SFP slot. The transmitter KE6910T and receiver KE6910R working as an IP-based extender 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 1 Gbps SFP fiber module* expansions, enabling connections via fiber optic network to extend transmission distances up to 10 km.

Other key highlights of the KE6910 Air Traffic Control Bundle Solution include that the solution features the dedicated LAN port for KE direct connections which can be isolated from the corporate network; it also provides secure data transmission – AES 128-bit encryption to secure all data before transmitted over a network and decrypts the data on the receiver. The solution adopts industry standard Transport Layer Security (TLS) protocol. Moreover, the KE6910 Air Traffic Control Bundle Solution features dual power supplies for redundancy, eliminating the need for a power adapter and effectively reducing the power configuration cost. The LAN and power redundancy supports dual power and network connections for system failover, ensuring robust system uptime.

In particular, ATEN KE6910 Air Traffic Control Bundle Solution supports the exceptional 2K x 2K screen resolutions dedicated for radar monitoring in Approach Control Room and Area Control Center specifically in air traffic control scenarios. It allows customizable hotkey settings for instant network port switching without going via CCKM – KVM over IP Matrix Manager, within the network of 2x Tx and 1x Rx deployment. These make the KE6910 Air Traffic Control Bundle Solution perfect for the ATC industry.

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

KE6910T Front View

KE6910R Front View

KE6910T Rear View

KE6910R Rear View

Features

Exclusive Features for ATC Industry

- Supports 2K x 2K video resolution (2048 x 2048 @ 60 Hz)
- Disconnection Alert - pop-up warning message and looping alarm beeping notify users the disconnection status
- Supports power / network failover – 2 DC jacks for power redundancy and 1 RJ-45 & 1 SFP fiber port for network failover to ensure constant availability for mission-critical applications

Advanced Features

- Rx access control – users at the Tx local console can enable / disable Rx access by simply pressing a control button*

*The KVM over IP Access Control Box (2XRT-0015G) is sold separately. Contact your ATEN dealer for product information.

Hardware

- Supports DVI-D Dual Link video resolutions up to 2560 x 1600 @ 60 Hz and 2560 x 2048 @ 50 Hz
- 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 1Gbps SFP fiber module expansions* for failover
- Supports 1Gbps SFP fiber module* expansions up to 10 km
- Power Redundancy – 2 DC Jack for power redundancy
- 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

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Management
- 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
- 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

Security
- Dedicated LAN port for KE direct connections – can be isolated from the corporate network
- Secure data transmission – AES encryption to secure Video / Keyboard / Mouse / Data transmission
- Supports industry standard Transport Layer Security (TLS) protocol
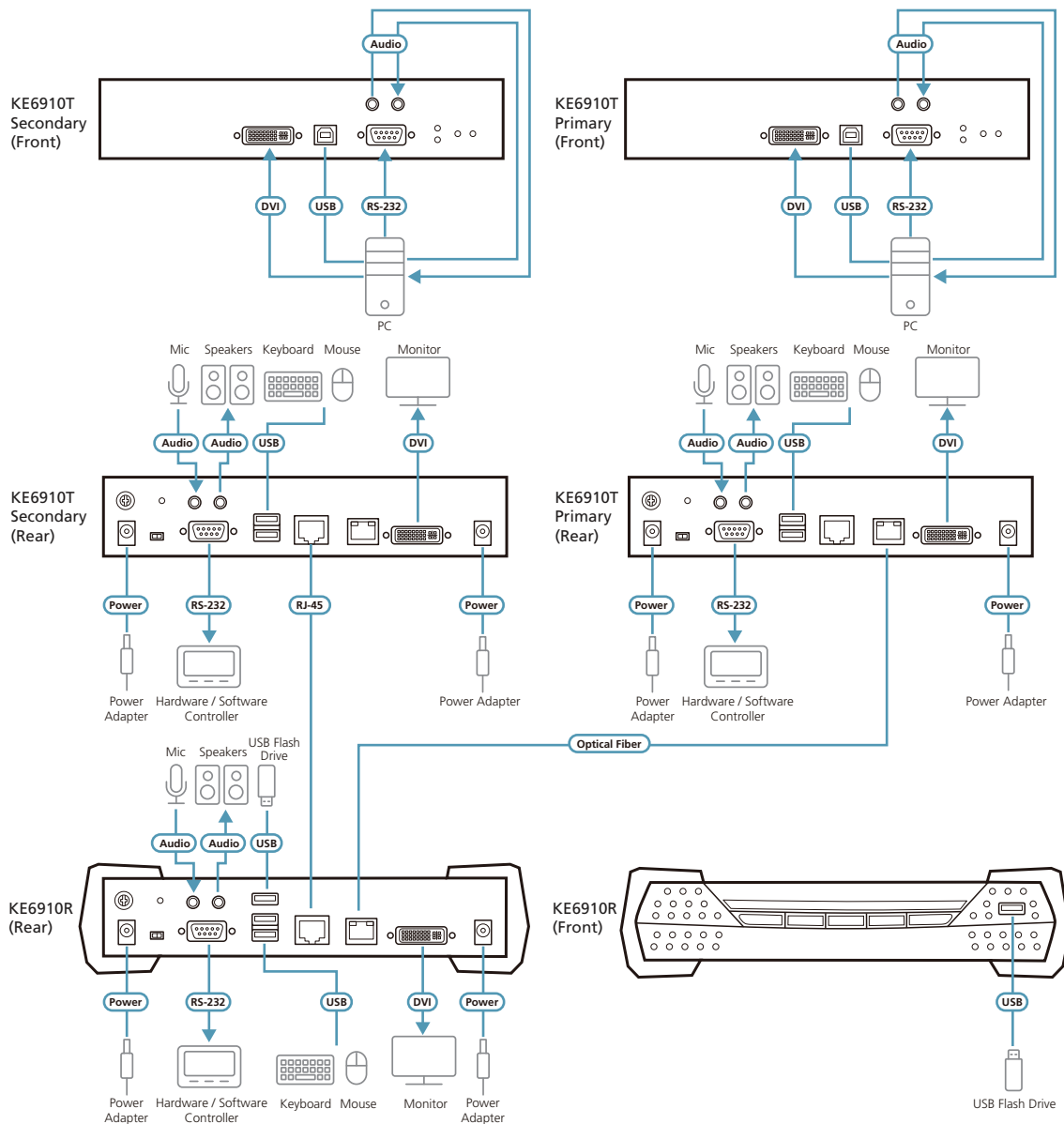
Virtual Media
- Virtual Media mode enhances data transmission performance, ideally for file transfers, OS patching, software installations and diagnostic testing
- Supports USB 2.0 DVD / CD drives, USB mass storage devices, PC hard drives and ISO images
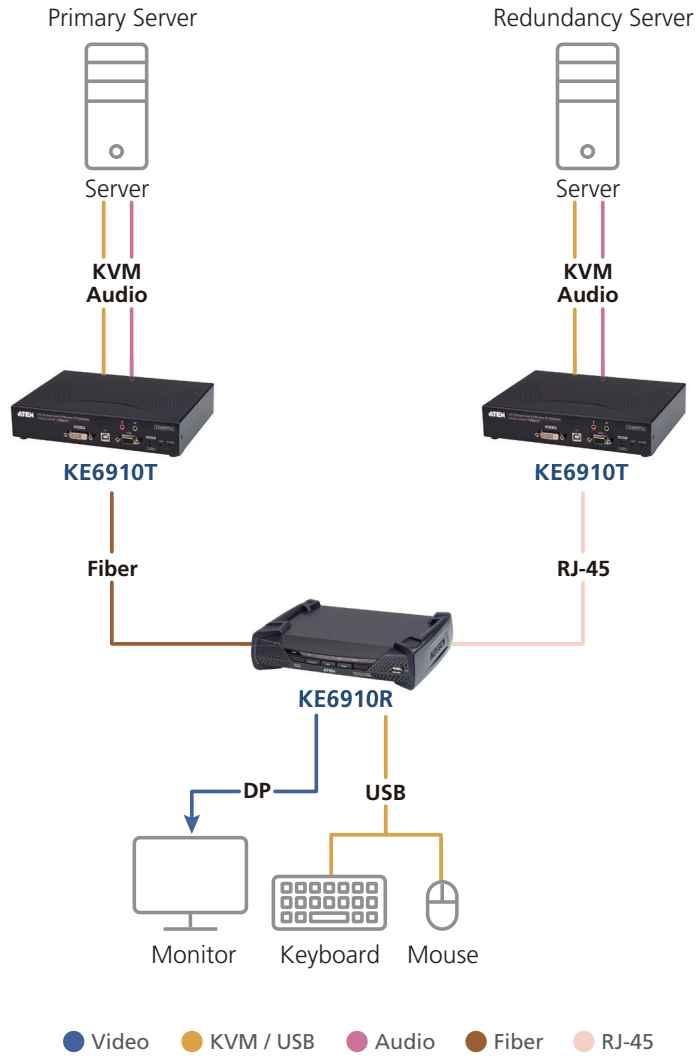- Supports Smart Card / CAC Reader

Highlights

Over IP	KE6910 extends a computer's KVM console any distance over a LAN by connecting the Tx and Rx units to the network. It also features a computer's KVM console up to 100 meters by directly connecting the Tx and Rx units with a single Cat 5e / 6 cable, and standard IP protocols ensuring maximum compatibility with users existing IT infrastructure and staff skill set.
Superior Video Quality	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 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).
Redundancy	The KE6910 supports connection via Gigabit Ethernet port (RJ-45) or SFP port for failover. Besides, the KE6910 supports dual power for redundant power supply, eliminating the need for a power adapter and effectively reducing the power configuration cost.
SFP Module	KE6910 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.

Customization	**KE6910 Air Traffic Control Bundle Solution** supports a customizable feature - hotkey switching for network ports. One of the Tx connects to the Rx via RJ-45 and the other Tx connects to the Rx via optical fiber connection. When one of the connected computers goes down, the operator can simply use the pre-configured hotkey to switch to the other network connected to the 2nd computer.
Enhanced Security Features	**KE6910 Air Traffic Control Bundle Solution** is compliant with universal enterprise grade security standards (AES encryption to secure Video / Keyboard / Mouse / Data transmission and Transport Layer Security (TLS) protocol). The KE extender provides different levels of username / password authentication and authorization.

Diagram

Scenario Diagram

Primary Server

Server

KVM
Audio

KE6910T

Fiber

Redundancy Server

Server

KVM
Audio

KE6910T

RJ-45

KE6910R

DP   **USB**

Monitor   Keyboard   Mouse

● Video   ● KVM / USB   ● Audio   ● Fiber   ● RJ-45

Specifications

	KE6910R	KE6910T
Connectors		
USB Port	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)	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)	
LAN Ports	1 x RJ-45 (Black) 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)	
Emulation		
Keyboard / Mouse	USB	
Power Consumption	DC 5 V : 9.02 W	DC 5 V : 10.02 W
Video Resolution	Up to 2560 x 2048 @ 50 Hz / 2560 x 1600 @ 60 Hz	
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	1.13 kg
Dimensions (L x W x H)	22.75 x 17.16 x 5.48 cm	21.50 x 16.33 x 4.18 cm