2K DVI-D Dual-Link KVM over IP Extender with Dual SFP
KE6920 / KE6922

● The KE6920 / KE6922 are high performance IP-based extenders consisting of a transmitter (KE6920T / KE6922T) and a receiver (KE6920R / KE6922R). The transmitter connects to a computer to deliver the computer's data to the receiver to collectively provide console access from a remote or separate location. The KE6920T / KE6922R allows extended access of computer systems remotely via USB consoles (USB keyboard, USB mouse, DVI monitor) over intranet, enabling users to place the computer system in secure and temperature controlled environments, which maybe isolated from users' workstation.

The KE6920 / KE6922 supports one DVI display at each end, providing video resolutions up to 2560 x 2048 @ 50Hz and flawless and lossless video compression quality with extremely low latency.

Both the KE6920 and KE6922 support network connections via the RJ-45 port or the two SFP slots. 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. By connecting via the SFP slots with 1Gbps SFP fiber module* expansions on fiber optic network, you can extend transmission distances up to 10km.

The KE6920/KE6922 also features dual power supplies for redundancy to ensure dependable services. Meanwhile, the KE6922 features Power over Ethernet (PoE) function where power can be supplied through a PoE Network Switch. This eliminates the need for a power adapter and opens up the opportunity to reduce power configuration cost.

The KE6920 / KE6922 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 KE6920 / KE6922 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 KE Matrix Management Software (CCKM), providing more flexible applications in different working environments.

When integrated with the KE Matrix Management Software, the KE6920 / KE6922 supports more advanced features such as authentication lock, adaptive fast switching, 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 KE6920 / KE6922 over a network. More functions include auto detection of all KE Series extenders** in 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 AES encryption support for secured data transmissions, and RADIUS, LDAP, AD or remote user authentication methods provide an added layer of connection security. Moreover, with an OSD, RS-232 support, and Auto MDIX, the KE6920 / KE6922 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, and 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 extension is required.

*The SFP module (2A-136G / 2A-137G) is sold separately. Contact your ATEN dealer for product information.
**Refer to www.aten.com for a list of the KE Series extenders.

KE6920R / KE6920T Front View

KE6920R

KE6920T

KE6922R / KE6922T Front View

KE6922R

KE6922T

KE6920R / KE6920T Rear View

KE6920R

KE6920T

KE6922R / KE6922T Rear View

KE6922R

KE6922T

Features

Exclusive Features for ATC Industry*

- Supports 2K x 2K video resolution (2048 x 2048 @ 60Hz)
- Adaptive Fast Switching – switches automatically and immediately between different Tx video resolutions on a Rx display (within 0.3 seconds)
- Boundless Switching - simply move the mouse cursor across screen boundaries to switch between different receivers (Rx)
- "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 – both KE6920 and KE6922 have 2 DC jacks for power redundancy while 1 RJ45 & 2 SFP fiber ports for network failover to ensure constant availability for mission-critical applications

Advanced Features*

- 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
- 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
- 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 devices are managed by KE Matrix Management Software (CCKM)

**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 @60Hz and 2560 x 2048 @50Hz
- Supports stereo speakers and stereo microphone
- Supports Virtual Media or vUSB
- 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 – both KE6920 and KE6922 have 2 DC jacks for power redundancy
- Supports Power over Ethernet (PoE) function – compliant with the IEEE 802.3at standard (KE6922 only)
- 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 (KE6920 only)

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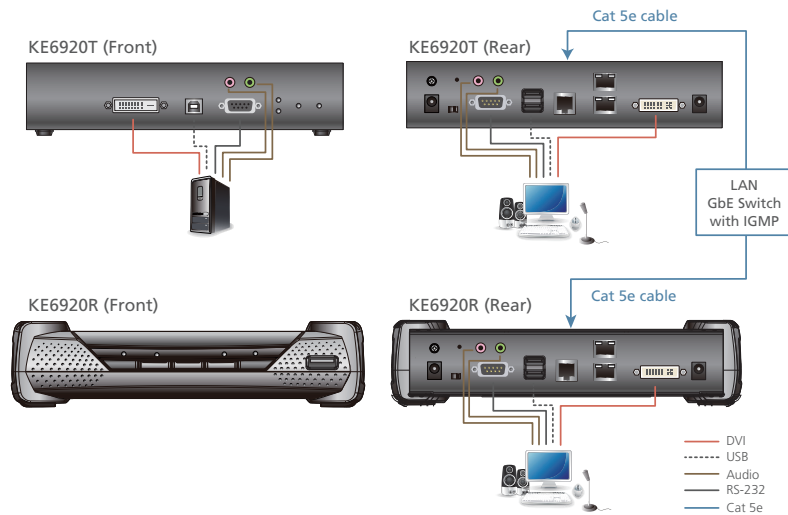
Virtual Media
- Virtual Media mode enhances data transmission performance, ideally for file transfers, OS patching, software installations and diagnostic testing
- Supports USB 2.0 DVD/CD drives, USB mass storage devices, PC hard drives and ISO images
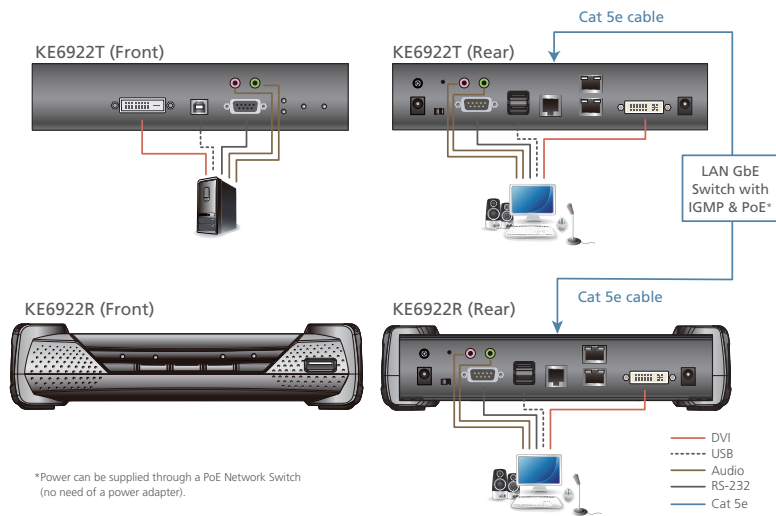- Supports Smart Card/CAC Reader

Highlights

Over IP	Extend a computer's KVM console any distance over a LAN by connecting the Tx and Rx units to your network. Extend a computer's KVM console up to 100 meters 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.
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 KE6920 / KE6922 supports DVI-D Dual Link video resolutions up to 2560 x 2048 @50Hz, including resolutions of 2560 x 1600 @60Hz and 2K x 2K (2048 x 2048 @60Hz).
Redundancy	The KE6920/KE6922 supports connection via Gigabit Ethernet port (RJ-45) and SFP ports for failover or for dual IP addresses access. The KE6920/KE6922 supports dual power for redundant power supply.
SFP Module	The KE6920/KE6922 supports 1Gbps SFP fiber module expansions, enabling connections with network switch allowing either an optical Fiber Channel SFP module or Active Copper SFP module. The single-mode SFP module provides 1GbE connectivity up to 10 kilometers while the multi-mode SFP module provides 1GbE connectivity up to 550 meters. **Note:** The SFP module (2A-136G / 2A-137G) is sold separately. Contact your ATEN dealer for product information.
Advanced Management System	The KE Matrix Management Software (CCKM) allows you to easily administer all KE devices over a network, using an intuitive user-friendly web based GUI.
Adaptive Fast Switching*	Automatically fast switches between different Tx video resolutions on a Rx display within 0.3 second, without the need to set video resolution for Fast Switching function.
Boundless Switching*	Simply move 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.
Flexibility	The KE extender allows you to access, share, and switch full control of Tx connected computers - from any Rx (KVM console) on the network. Flexibly allows One-to-One, One-to-Many, Many-to-One, or Many-to-Many computer to KVM console connections.
Enhanced Security Features	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.

*These advanced functions are supported when the KE transmitters are paired with KE receivers and managed by KE Matrix Management Software (CCKM).
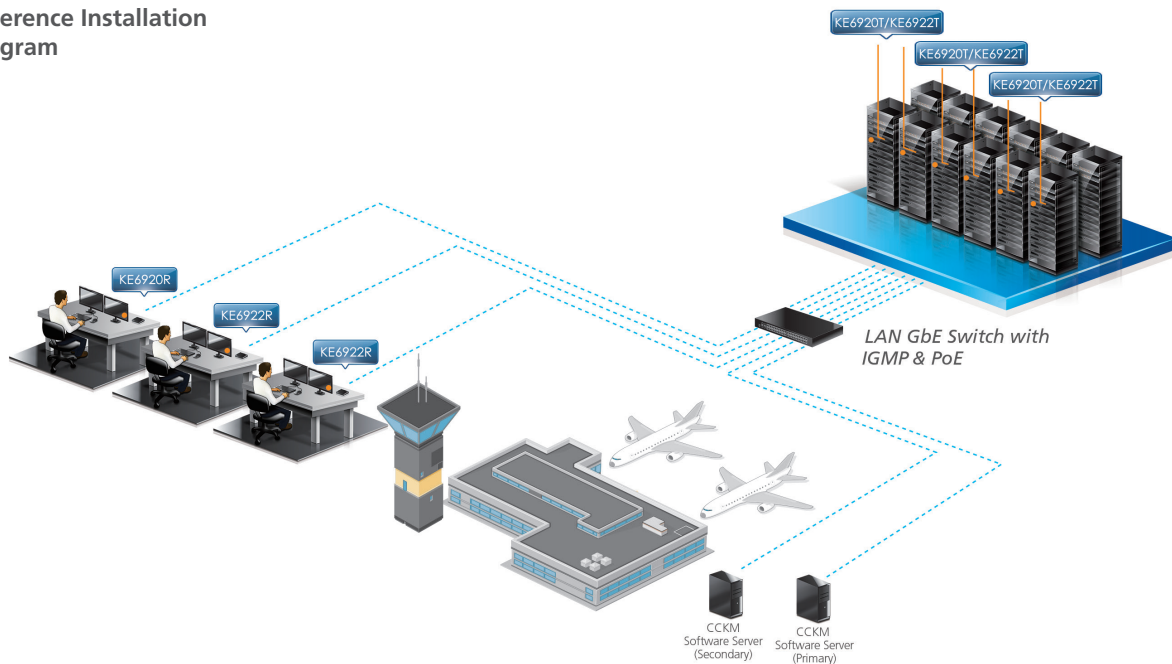
KE6920 Diagram

KE6920T (Front)

KE6920T (Rear)

Cat 5e cable

LAN GbE Switch with IGMP

KE6920R (Front)

KE6920R (Rear)

Cat 5e cable

- DVI
- USB
- Audio
- RS-232
- Cat 5e

KE6922 Diagram

KE6922T (Front)

KE6922T (Rear)

Cat 5e cable

LAN GbE Switch with IGMP & PoE*

KE6922R (Front)

KE6922R (Rear)

Cat 5e cable

*Power can be supplied through a PoE Network Switch (no need of a power adapter).

- DVI
- USB
- Audio
- RS-232
- Cat 5e

Reference Installation Diagram

KE6920T/KE6922T

KE6920T/KE6922T

KE6920T/KE6922T

KE6920R

KE6922R

KE6922R

LAN GbE Switch with IGMP & PoE

CCKM Software Server (Secondary)

CCKM Software Server (Primary)

Specifications

Functions	KE6920R	KE6922R	KE6920T	KE6922T
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)			
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 RJ-45 (Black, PoE)	1 x RJ-45 (Black)	1 x RJ-45 (Black, PoE)
	2 x SFP Slot	2 x SFP Slot	2 x SFP Slot	2 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				
Link 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:8.86W:67BTU		DC5V:10.87W:55BTU	
Video Resolution	Up to 2560 x 2048 @ 50Hz/2560 x 1600 @ 60Hz			
Environmental				
Operating Temperature	0 - 50°C			
Storage Temperature	-20 - 60°C			
Humidity	0 - 95% RH, Non-condensing			
Physical Properties				
Housing	Metal			
Weight	1.27 kg	1.30 kg	1.15 kg	1.18 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	

Product information is subject to change without prior notice.

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