Slim DVI-D / HDMI / DisplayPort KVM over IP Extender
KE6900ST / KE8900ST / KE8900SR / KE9900ST

The KE6900ST / KE8900ST / KE8900SR / KE9900ST Slim DVI-D / HDMI / DisplayPort KVM over IP Extender is a compact and affordable high performance IP-based transmitter (KE6900ST / KE8900ST / KE9900ST) / receiver (KE8900SR) that allows access to a computer system from a remote USB console (USB keyboard, USB mouse, DVI-D / HDMI / DisplayPort monitor) over an intranet, enabling users to locate computers in a secure and temperature controlled environment, which is isolated from users' workstation. All the extenders can be paired with any KE series* receiver or transmitter for a savings solution that stays within budget.

For the transmitters, the KE6900ST, KE8900ST, and KE9900ST each support DVI-D / HDMI / DisplayPort video input from the computer while the paired KE Series receiver supports DisplayPort, DVI or HDMI monitor output. For the receiver, the KE8900SR supports one HDMI monitor output. Both of the transmitters and receiver are provide video resolutions up to 1920 x 1200 @ 60 Hz and offer flawless and lossless video quality with extremely low latency. The extender also supports Virtual Media function and RS-232 serial commands. In addition to a DC power jack, the KE8900ST / KE9900ST transmitter includes an extra DC terminal block for convenient installation.

The KE6900ST / KE8900ST / KE8900SR / KE9900ST 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. Moreover, the KE8900S 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 KVM over IP Matrix Manager (CCKM), providing more flexible applications in different working environments.

The KVM over IP extender provides multiple ways for configuration, such as the receiver's local OSD, CCKM, or RS-232 / Telnet text menu. The KVM over IP extender also offers enhanced security features such as supporting AES encryption for secured Video / Keyboard / Mouse / USB data transmissions and RADIUS / LDAP / AD or remote user authentication that provides an added layer of connection security.

When integrated with the CCKM, the KVM over IP extender supports more advanced features such as boundless switching, fast switching, video wall, multi display, profile scheduling, auto detection of all KE Series extenders on the same subnet for the sake of fast installation or configuration, as well as username / password authentication and authorization. Please refer to the CCKM webpage for more details.

When working without the CCKM centralized management, the KVM over IP extender features the Slim Matrix Mode that makes up to 12 units of KE6900ST / KE8900ST / KE9900ST connect with unlimited Rx units. It means up to 12 IPs can be used to set transmitters.

Whether the user is configuring, monitoring, administrating, 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, as well as to provide solutions in broadcasting, control center, multimedia, manufacturing and many other industries where matrix extending is required.

Note: Please visit www.aten.com comprehensive list of the KVM over IP extenders.

KE6900ST Front View

KE6900ST Rear View

KE8900ST Front View

KE8900ST Rear View

KE8900SR Front View

KE8900SR Rear View

KE9900ST Front View

KE9900ST Rear View

HDMI™
HIGH-DEFINITION MULTIMEDIA INTERFACE

Features

Advanced Features*

- Lossless video compression up to 1920 x 1200 @ 60Hz with low latency
- ATEN Matrix Link app — allows users to instantly link transmitters and receivers to perform real-time port and profile switching on an iPad
- Fast Switching — switching between different remote video resolutions on a local display within 0.3 second
- Flexible connections — allows multiple extender and matrix connections for multi-display installations and video wall applications
- "Push" and "Pull" — share content instantly by just one click
- Boundless Switching — simply moves the mouse cursor across screen borders to switch between different receivers (Rx)
- Video Walls — creates multiple video walls with up to 12 x 12 (144 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 — LDAP, Active Directory, RADIUS and TACACS+
- Advanced User Authorization Settings — administrators can set up to four access modes on Tx devices for collaboration or prevention of interference among users
- Configurable user and group permissions for access and control of the KVM over IP extenders
- Tx grouping of up to 4 sets of KVM over IP transmitters to support multi-display applications

Note: *These advanced functions are supported when the KVM over IP extenders are managed by CCKM.

Slim Matrix Mode
- Works without CCKM centralized management
- Fast Switching — switching between different remote video resolutions on a local display within 0.3 second (OSD available only with Slim Matrix Mode)
- Hotkey switch ports — supports to switch to the other transmitters by pre-defined hotkeys Ctrl + F1 ~ Ctrl + F12
- Supports primary server reconnect notification

Hardware
- High speed USB Storage Transmission support
- Compliant with HDMI (KE8900S)
- Auto-MDIX — automatically detects cable type
- Built-in 8 KV / 15 KV ESD protection and 1 KV surge protection
- Slim, light and fanless design for silent operations that are energy efficient
- Support connection via Gigabit Ethernet port
- Wall mounting, and rack mounting available

Management
- OSD (On Screen Display) — enables configuration of both Tx / Rx devices on the receiver's display screen
- EDID Expert™ — selects optimum EDID settings to prevent video compatibility issue caused by different monitors
- On-screen Preview (Panel Array™ Mode) — allows users to view the video of up to 36 displays on one screen
- Video Compression Level — allows users to increase/decrease the video quality to adjust for appropriate network bandwidth
- Command Line Interface — administrators can control all KVM over IP extenders via RS-232 or Telnet by issuing commands or 3rd-party application
- RS-232 serial ports — allow you to connect to a serial terminal for text menu, CLI, or serial devices such as touch screens and barcode scanners
- Compatible with all KE extenders

Security
- Dedicated LAN port for KE direct connections — can be isolated from the corporate network
- Secure data transmission — 128-bit AES encryption for all data being transmitted from the transmitter to the receiver
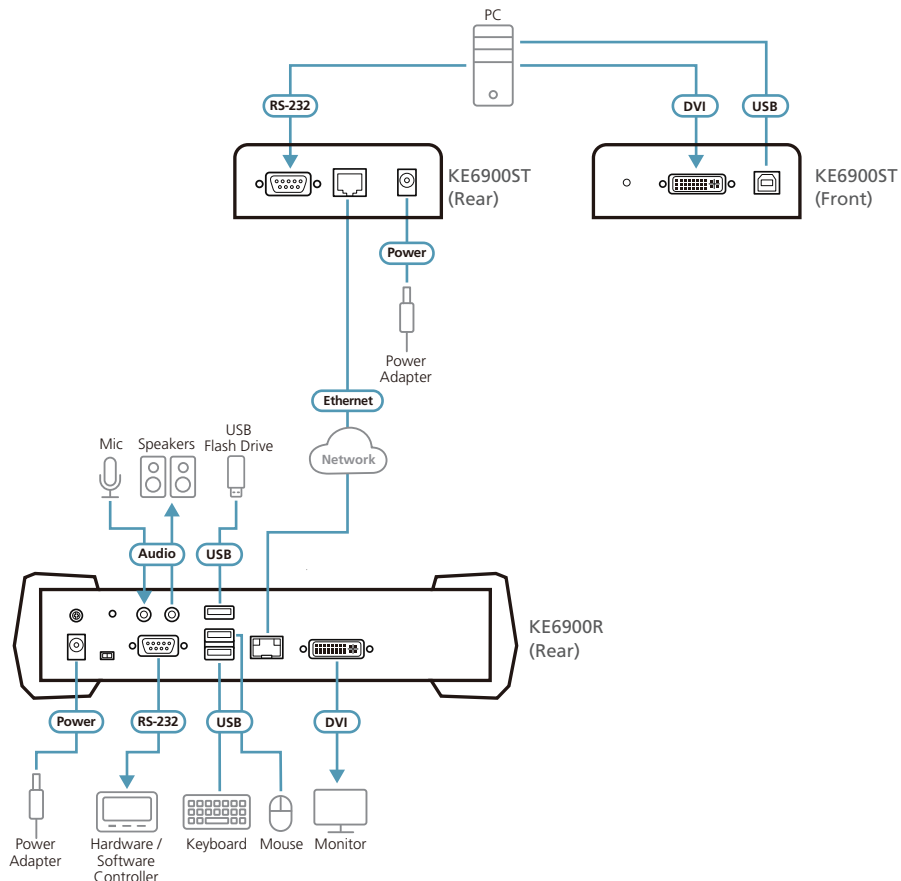- Supports industry standard Transport Layer Security (TLS) protocol

Virtual Media
- Virtual Media enables file transfers, OS patching, software installations and diagnostic testing
- Support USB 2.0 DVD / CD drives, USB mass storage devices, PC hard drives and ISO images
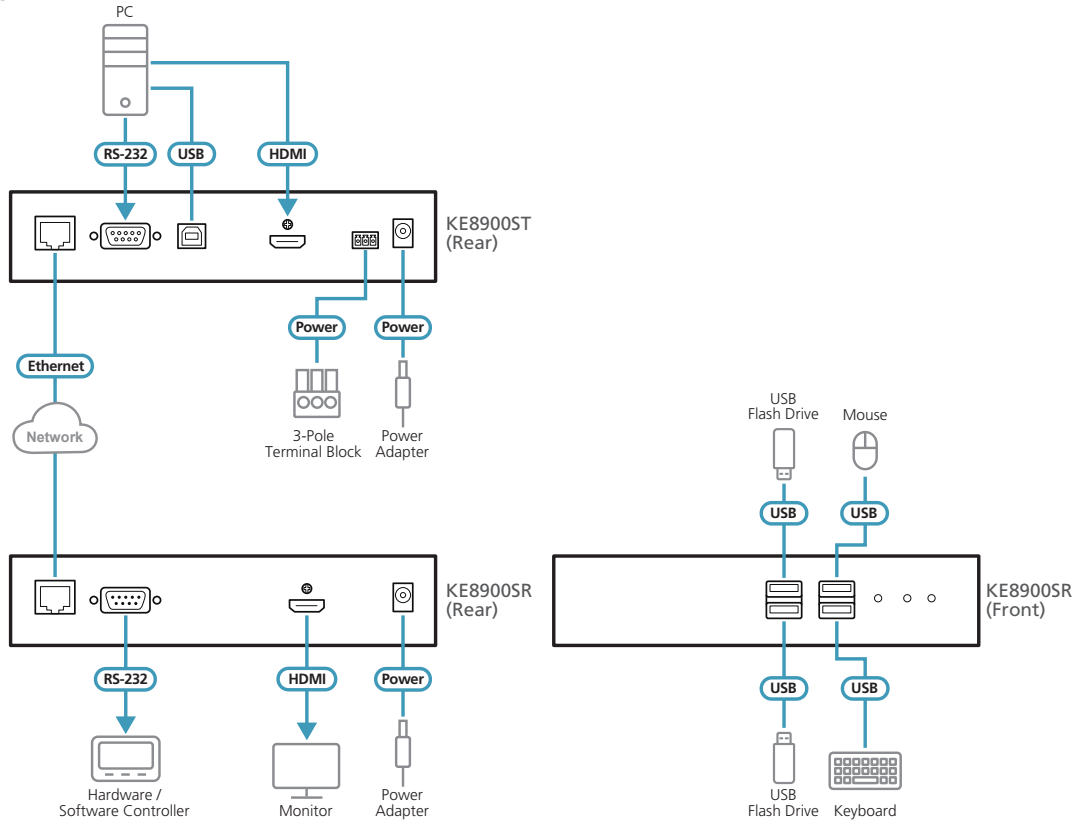- Support Smart Card / CAC Reader

Highlights

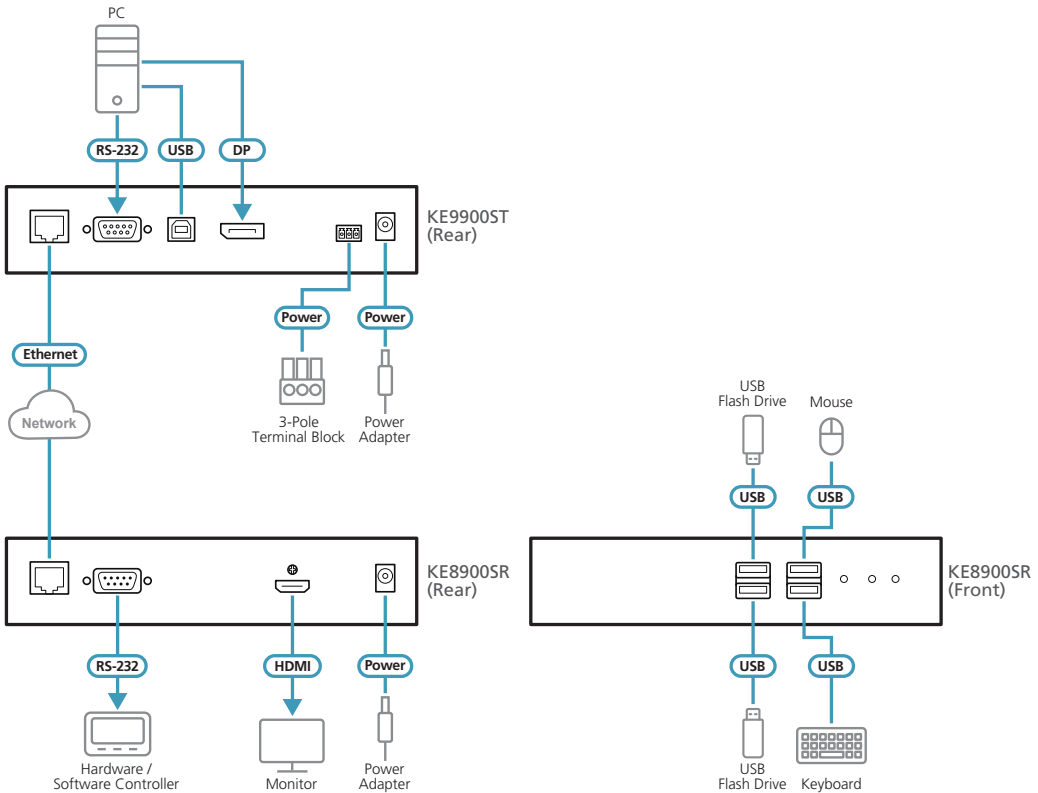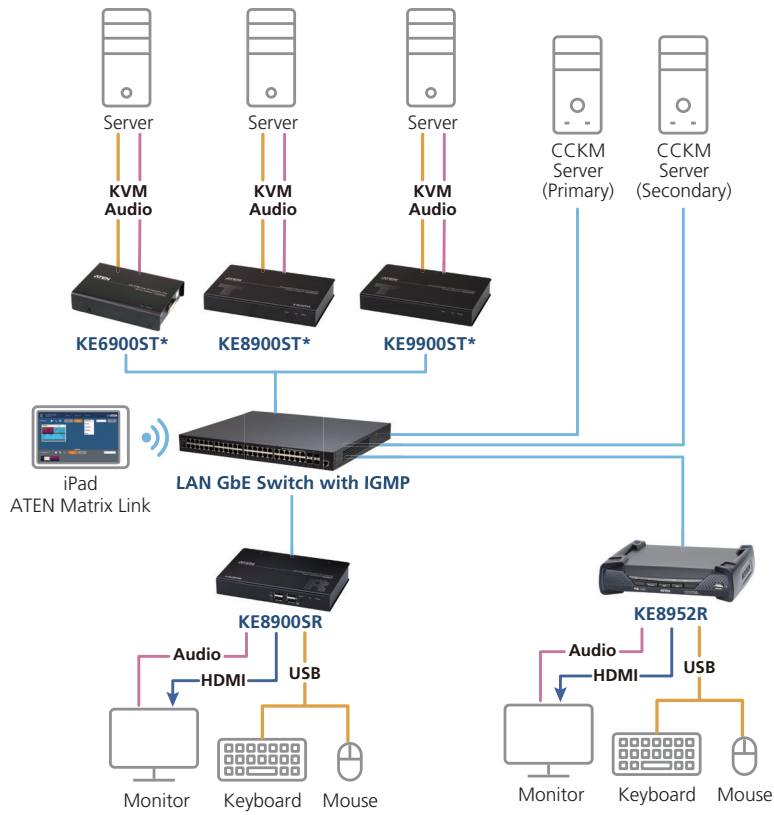|	
Over IP Extension	Extend a computer's KVM console any distance over a LAN by connecting the Tx and Rx units to the same network. Extends a computer's KVM console up to 100 meters by directly connecting the Tx and Rx units with a single Cat 5e / 6 cable. Standard IP protocols ensure maximum compatibility with your existing IT infrastructure and staff skill set.
Flexibility	The KVM over IP extenders allows users to access, share, and switch full control of Tx connected computers – from any Rx (KVM console) over the network. It flexibly allows point-to-point, point-to-multipoint, multipoint-to-point, or multipoint-to-multipoint computer to KVM console connections.
Superior Video Quality	ATEN's advanced graphics processor delivers video that ensures users to experience the same vivid and sharp quality on the remote monitor no matter how far away the console is located.
Enhanced Security	Compliant with universal enterprise grade security standards (AES encryption to secure Video / Keyboard / Mouse / Data transmission and Transport Layer Security (TLS) protocol). The KVM over IP extenders provides different levels of username/password authentication and authorization.
Advanced Management System	The CCKM allows users to easily administer all KVM over IP extenders over a network, using an intuitive, user-friendly web-based GUI.
Boundless Switching*	Users can simply move the mouse cursor across screen bounders 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 KVM over IP extenders are managed by CCKM.

KE6900ST Diagram

KE8900S Diagram

PC

RS-232 | USB | HDMI

KE8900ST
(Rear)

Power | Power

Ethernet

Network

3-Pole
Terminal Block

Power
Adapter

KE8900SR
(Rear)

RS-232 | HDMI | Power

Hardware /
Software Controller

Monitor

Power
Adapter

USB
Flash Drive | Mouse

USB | USB

KE8900SR
(Front)

USB | USB

USB
Flash Drive

Keyboard

KE9900ST Diagram

PC

RS-232 | USB | DP

KE9900ST
(Rear)

Power | Power

Ethernet

Network

3-Pole
Terminal Block

Power
Adapter

KE8900SR
(Rear)

RS-232 | HDMI | Power

Hardware /
Software Controller

Monitor

Power
Adapter

USB
Flash Drive | Mouse

USB | USB

KE8900SR
(Front)

USB | USB

USB
Flash Drive

Keyboard

Scenario Diagram

Slim Matrix Mode Installation Diagram

*KE transmitters can be connected up to 12 units

● KVM / USB   ● Audio   ● Network
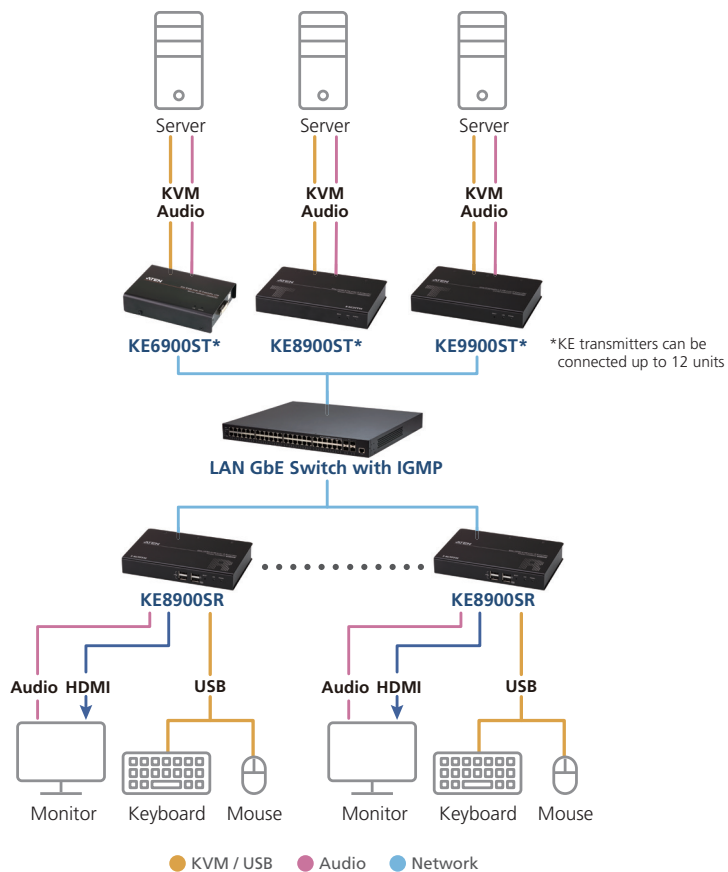
Specifications

	KE6900ST
Connectors	
KVM Ports	1 x USB Type-B Female (White) 1 x DVI-D Female (White) 1 x DB-9 Female (Black)
Power	1 x DC Jack (Black)
LAN Ports	1 x RJ-45 (Black)
Switches	
Reset	1 x Semi-recessed Pushbutton
LEDs	
10/100/1000 Mbps	1 (Green / Orange)
Power	1 (Blue)
Emulation	
Keyboard / Mouse	USB
Power Consumption	DC 5 V:3.35 W
Video Resolution	Up to 1920 x 1200 @ 60 Hz
Environmental	
Operating Temperature	0 – 50 °C
Storage Temperature	-20 – 60 °C
Humidity	0 – 95% RH, Non-condensing
Physical Properties	
Housing	Metal
Weight	0.43 kg
Dimensions (L x W x H)	14.39 x 10.30 x 3.00 cm

	KE8900ST	KE8900SR
Connectors		
Virtual Media	N/A	2 x USB Type-A Female (Black)
KVM Ports	1 x USB Type-B Female (White) 1 x HDMI Female (Black) 1 x DB-9 Female (Black)	2 x USB Type-A Female (Black) 1 x HDMI Female (Black) 1 x DB-9 Male (Black)
Power	1 x DC Jack (Black) 1 x 3-Pole Terminal Block Connector (Green)	1 x DC Jack (Black)
LAN Ports	1 x RJ-45 (Black)	
Switches		
Reset	1 x Semi-recessed Pushbutton	
LEDs		
10/100/1000 Mbps	1 (10: Orange / 100: Orange & Green / 1000: Green)	
Power	1 (Blue)	
Emulation		
Keyboard / Mouse	USB	
Power Consumption	DC 5 V:4.3 W DC 48 V:6.61 W	DC 5 V:4.35 W
Video Resolution	Up to 1920 x 1200 @ 60 Hz	
Environmental		
Operating Temperature	0 – 50 °C	
Storage Temperature	-20 –60 °C	
Humidity	0 – 95% RH, Non-condensing	
Physical Properties		
Housing	Metal	
Weight	0.65 kg	0.64 kg
Dimensions (L x W x H)	18.20 x 11.75 x 2.87 cm	

	KE9900ST
Connectors	
KVM Ports	1 x USB Type-B Female (White) 1 x DisplayPort Female (Black) 1 x DB-9 Female (Black)
Power	1 x DC Jack (Black) 1 x 3-Pole Terminal Block Connector (Green)
LAN Ports	1 x RJ-45 (Black)
Switches	
Reset	1 x Semi-recessed Pushbutton
LEDs	
10/100/1000 Mbps	1 (10: Orange / 100: Orange & Green / 1000: Green)
Power	1 (Blue)
Emulation	
Keyboard / Mouse	USB
Power Consumption	DC 5 V:4.75 W DC 48 V:6.97 W
Video Resolution	Up to 1920 x 1200 @ 60 Hz
Environmental	
Operating Temperature	0 – 50 °C
Storage Temperature	-20 – 60 °C
Humidity	0 – 95% RH, Non-condensing
Physical Properties	
Housing	Metal
Weight	0.65 kg
Dimensions (L x W x H)	18.20 x 11.75 x 2.87 cm

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Product information is subject to change without prior notice.