Slim HDMI KVM over IP Extender (Transmitter / Receiver)
KE8900ST / KE8900SR

The KE8900S Slim HDMI KVM over IP Extender is a pair of compact and affordable high performance IP-based transmitter (KE8900ST) / receiver (KE8900SR) that allows access to a computer system from a remote USB console (USB keyboard, USB mouse, HDMI monitor) over an intranet, enabling users to locate computers in a secure and temperature controlled environment, which is isolated from users' workstation. The KE8900ST or KE8900SR can be paired with any KE Series* receiver or transmitter for a savings solution that stays within budget.

The KE8900ST supports HDMI video input from the computer while the KE8900SR supports one HDMI monitor output, providing video resolutions up to 1920 x 1200 and flawless and lossless video compression quality with minimal latency. The extender also supports Virtual Media function and RS-232 serial commands. In addition to a DC power jack, the KE8900ST transmitter includes an extra DC terminal block for convenient installation.

The KE8900ST 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.

Whether you're 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.

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

HDMI™
HIGH-DEFINITION MULTIMEDIA INTERFACE

KE8900ST Front View

KE8900SR Front View

KE8900ST Rear View

KE8900SR Rear View

Features

Hardware

- Advance processor provides lossless and low latency video transmissions up to 1920 x 1200 @ 60Hz; 24-bit color depth
- Support standard HDMI resolutions from 640 x 480 up to 1920 x 1200
- High speed USB Storage Transmission support
- Compliant with HDMI and HDCP 1.4
- Auto-MDIX – automatically detects cable type
- Built-in 8KV/15KV ESD protection and 1KV surge protection
- Slim, light and fanless design for silent operations that are energy efficient
- Support connection via Gigabit Ethernet port
- Rack Mountable* and Wall Mountable
- Mounting options:
  - VE-RMK 1U Extender Rack Mount Kit*

Note: *Refer to www.aten.com for more regarding the VE-RMK 1U Extender Rack Mount Kit.

Management

- Remotely access computers on your KVM installation via intranet
- OSD (On Screen Display) on the Receiver configures both Tx/Rx units
- EDID Expert™ – selects optimum EDID settings for smooth power-up and highest quality display
- 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 KVM over IP extenders via RS-232 or Telnet by issuing commands
- 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 KVM over IP extenders

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 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

Advanced Features**

- 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
- Fast Switching – switch between different remote video resolutions on a local display within 0.3 second
- Boundless Switching - simply move the mouse cursor across screen boundaries to switch between different receivers
- Video Walls – create 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 – to stream video, audio, USB, and serial sources independently
- 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 the KVM over IP extenders
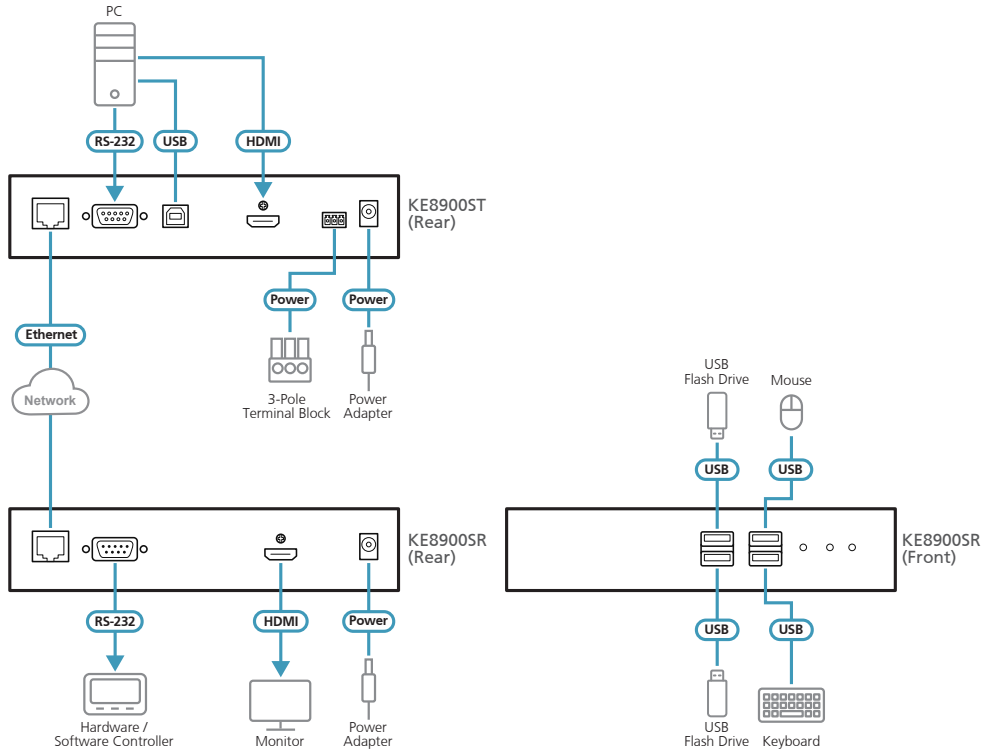- Tx grouping of up to 4 sets of KE transmitters to support multi-display applications

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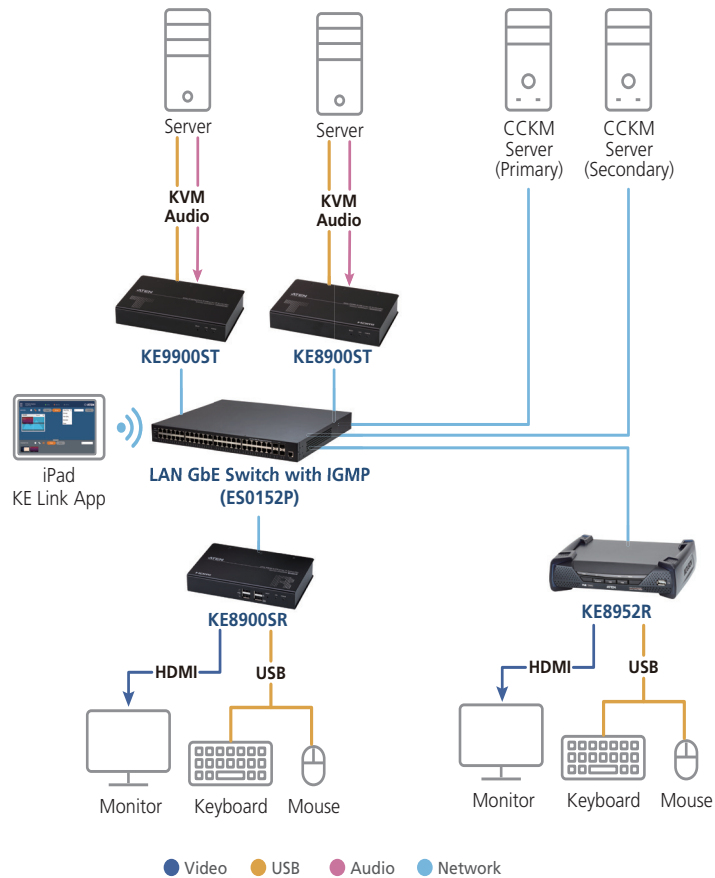
Highlights

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.
Flexibility	The KVM over IP extenders 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.
Superior Video Quality	ATEN's advanced graphics processor delivers video that ensures you will 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 you to easily administer all KVM over IP extenders over a network, using an intuitive user-friendly web based GUI.
Fast Switching*	Fast switching feature allows switching between the Tx devices within 0.3 second. Users can operate keyboard / mouse immediately without waiting for the process of USB enumeration. This is ideally for control center application, which has strong demand for the seamless operation.
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.

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

KE8900S Diagram

PC

RS-232 · USB · HDMI

KE8900ST (Rear)

Ethernet

Network

Power · Power

3-Pole Terminal Block · Power Adapter

USB Flash Drive · Mouse

USB · USB

KE8900SR (Front)

KE8900SR (Rear)

RS-232 · HDMI · Power

Hardware / Software Controller · Monitor · Power Adapter

USB · USB

USB Flash Drive · Keyboard

Reference Installation Diagram

Server · Server · CCKM Server (Primary) · CCKM Server (Secondary)

KVM Audio · KVM Audio

KE9900ST · KE8900ST

iPad KE Link App

LAN GbE Switch with IGMP (ES0152P)

KE8900SR · KE8952R

HDMI · USB · HDMI · USB

Monitor · Keyboard · Mouse · Monitor · Keyboard · Mouse

● Video ● USB ● Audio ● Network

Specifications

	KE8900SR	KE8900ST
Connectors		
Virtual Media	2 x USB Type-A Female (Black)	N/A
Console Ports	2 x USB Type-A Female (Black)	N/A
	1 x HDMI Female (Black)	
	1 x DB-9 Male (Black)	
KVM Ports	N/A	1 x USB Type-B Female (White)
		1 x HDMI Female (Black)
		1 x DB-9 Female (Black)
Power	1 x DC Jack (Black)	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 5V / 4.35W	DC 5V / 4.3W
		DC 48V / 6.61W
Video Resolution	Up to 1920 x 1200 @ 60Hz	
Environmental		
Operating Temperature	0° – 50°C	
Storage Temperature	-20° – 60°C	
Humidity	0–95% RH, Non-condensing	
Physical Properties		
Housing	Metal	
Weight	0.64 kg	0.65 kg
Dimensions (L x W x H)	18.20 x 11.75 x 2.87 cm	

Product information is subject to change without prior notice.