



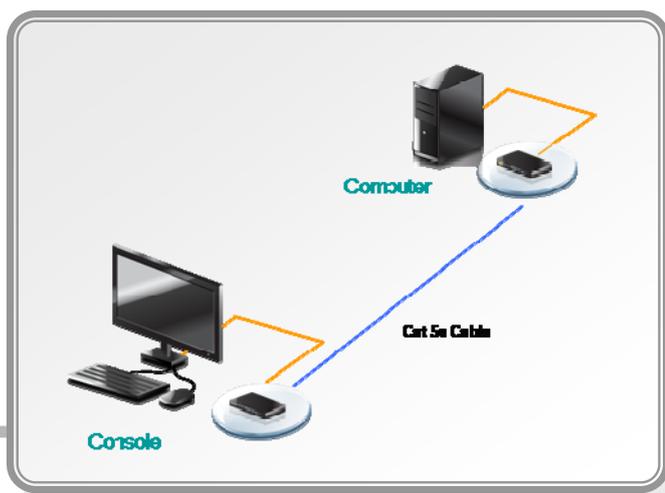
***Reach Out and Take Control of Your Network with ATEN
KVM Extender Solutions***

In the realm of connectivity products, one of the most overlooked, yet valuable, tools in the arsenal of the network administrator is the console extender – also known as a KVM extender. Whilst the technology has been around for many years, KVM extenders have certainly proved to have quite the staying power.

A KVM extender's primary function is to “extend” the distance between a console (keyboard, monitor and mouse) and a server or computer. The benefits of these devices are countless and the possible applications are endless. KVM extenders empower users to control a server or KVM switch from a convenient remote location -- away from loud and secure server rooms. This is particularly useful in instances where the server is physically located in a harsh environment.

KVM extender solutions typically consist of a local unit (transmitter), a remote unit (receiver), power adapter and requisite cables. A KVM extender connects remote and local units using inexpensive LAN (or CAT5) cables and enables system operation from both local and remote locations. The local unit connects to the computer while the console attaches to the remote device. From there, the remote and local devices communicate video and data with each other.

In a manufacturing setting, for example, a computer can be placed in a secure, environmentally controlled server room leaving only the keyboard, monitor and mouse exposed to harmful conditions. Additionally, KVM extenders solve the issue of relocating computers which give off an abundance of heat. To expand IT management further, KVM extenders can be connected to supported KVM switches to control additional computers or servers.



Offered by a variety of vendors, KVM extenders sometimes include value-added features such as audio functionality, IP connectivity, and RS-232 support which provides increased flexibility.

KVM extenders can also maintain excellent video quality over extended distances and provide a serial channel for devices such as touchscreens and barcode scanners.

Fundamentally, KVM extenders can be categorized into remote and near-side devices and utilize cost-effective and easily accessible CAT5 cabling to connect both devices in order to lengthen the distance of use. Even when using GUI-based applications, KVM extenders enable network administrators to access a computer from a remote location as if they were directly in front of the computer.

The deployment of KVM extenders that utilize CATx cables offer significant cost savings. A single CAT5e cable is now common whereas, in the past, a fiber optic device was the only viable option. Not only is fiber optic hardware more costly than their CATx equivalent, the installation of fiber cables is more expensive, as well.

Scenarios for KVM Extenders

KVM extenders offer a multitude of uses for manufacturing-centric organizations, construction sites, warehouse/distribution, brick and mortar retail locations, small-to-medium businesses (SMBs) and small offices/home offices (SOHOs). Below are some sample scenarios in which KVM extenders can be added to improve IT management:

- **Manufacturing and Environment:** Ideal tool for harsh environments where it is important to separate the mouse, monitor and keyboard from the computer. This separation is



essential in manufacturing where the computer should be shielded from dirt, dust, oil or moisture.

• **Security/Surveillance Systems:** For security and



monitoring purposes, users can install a camera and microphone in one area while placing the console in a

convenient location for easy access and monitoring. To remove physical access to the computer, a KVM extender can eliminate this risk by storing the computer in a secured area. This is ideal for managing highly confidential data systems.

• **Healthcare/Hospitals:**

Medical records can be reviewed from one server via two separate rooms without the need to deploy a network.



• **Retail:** With brick and mortar retailers trying to replicate the interactivity of the online buying experience, these units are perfect for kiosks such as store information, bridal registries, etc. Kiosks, especially, need a KVM workstation that is



physically detached from the computer or KVM switch which is housed in a secure area.

• **Offices:** For IT managers whose offices are located outside of the data center for security, noise or climate reasons, these products offer simple cost effective central and remote management tools to serve as console duplicators. A receptionist can



access a computer located in a back office – away from the reception area.

• **Small Office/Home Office (SOHO):** For workers in the home or small office environment with one PC located in one part of the house and there is a need to access recipes in the kitchen or have to surf the Internet for car parts in the garage, then these products are ideal.



➔ **Conclusion**

KVM extenders have applications that reach far beyond the server room. Being able to extend the distance between a computer and console, or centralize control of a number of computers in a different location, is useful in a wide range of environments, from Internet cafes to production lines. All of these environments require high-quality video to be extended over long distances. With KVM extender technology,

As evidenced, KVM extenders continue to thrive throughout a wide range of industries due to cost efficiency, easy cable management via CAT5, high video resolution and long distance transmission.

ATEN KVM Extender Solutions

>>ATEN CE790 Digital KVM Extender + Audio



The CE790 is an IP-based KVM Extender with automatic cable detection (Auto-MDIX) and RS-232 serial functionality that allows access to a computer system from a remote USB console (USB keyboard, monitor, and USB mouse) anywhere on the intranet.

>>ATEN CE770 USB KVM Extender + Audio (With Deskew)



The CE770 is a USB based KVM Extender with Deskew function, which automatically synchronizes the time delay of RGB signals to compensate for distance. The automatic signal compensation and RS-232 serial functionality allow access to a computer system from a remote USB console.

>>ATEN CE800B USB KVM Extender + Audio



The CE800B USB KVM Extender with on-board audio allows access to a computer system from a remote USB console. The CE800B has built-in USB ports that support USB Mass Storage compliant flash drives. The addition of a Type B USB port on the local unit means that the flash drive facility is fully supported in both PC-only and KVM switch installation.

>>ATEN CE700A USB KVM Extender



The CE700A is a USB KVM Extender with superior video quality and built-in ESD and surge protection that allows access to a computer system up to 150 meters away from a remote USB console (USB keyboard, monitor, and USB mouse).

>> **ATEN CE350/CE370 PS/2 KVM Extender**

Extension
150m
(CE350)

Extension
300m
(CE370)



The CE350 / CE370 is a PS/2 based KVM Extender with automatic signal compensation and RS-232 serial functionality allow access to a computer system from a remote PS/2 console. It allows access to a computer system from a remote console, the CE350 / CE370 is perfect for use in any type of installation where you need to place the console conveniently accessible, but want the system equipment to reside in a safe location – away from the dust and dirt of the factory floor, or the harsh environmental influence of a construction site, for example. This allows users to deploy system equipment over large distances.

>> **ATEN CE250A PS/2 KVM Extender**

Extension
150m

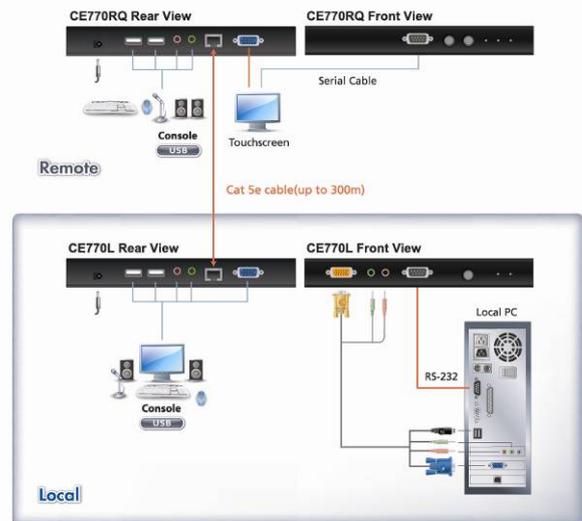


The CE250A KVM Extender is perfect for factory and construction sites, or any type of installation where the console needs to be in a conveniently accessible location, but you want the system equipment to reside in a safe place - away from dust, and harsh environmental influences.

📌 **Installation**

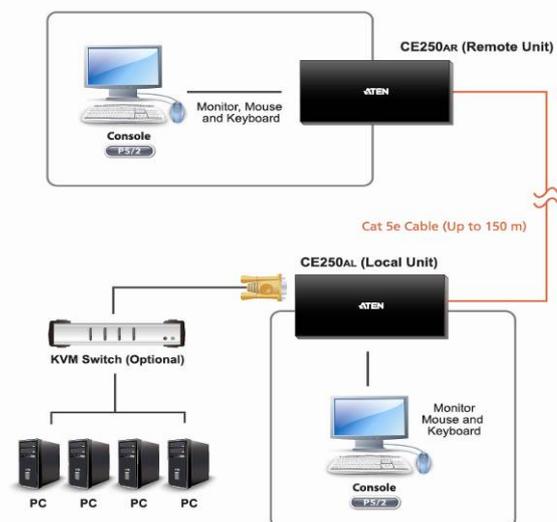
>> **Basic Installation**

The local and remote KVM extender units connect via Cat 5e cable to control one computer from a remote location, 100-300m away.



>> **Advanced Installation**

ATEN KVM Extenders can be connected to supported ATEN KVM switches. You can control multiple computers from a remote location as shown below.





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