

# Zero-U, Digital KVM over IP Solution

*Instant, clutter-free, space-saving & non-intrusive remote management*

A zero-U form factor digital KVM over IP solution provides 24/7 remote accessibility of mission-critical data over the Internet by attaching directly to:

- Video output (DVI/VGA connector) of a 1U or higher rack mounted server
- DVI/VGA Desktop PC with on-board video
- DVI/VGA PCI or AGP video card
- Analog KVM (keyboard, video, mouse) switch

**KVM over IP: provides the remote control of a server's keyboard, video and mouse (KVM) over the Internet -- users can control a server from anywhere in the world.**

The compact, easy-to-use design allows administrators to remotely access and control multiple servers from a single user console. And, the KVM solution will not take up the rack's valuable real estate reserved for a business' server and storage needs. This technology is ideal for managing densely packed 1U and 2U rack mount servers.

The advantage of implementing a zero-U KVM over IP solution is that it is a non-intrusive method of managing a server and extending analog KVM over the Internet. The administrator can attach it to the back of the server's VGA and PS/2 keyboard and PS/2 mouse ports. Once it is connected to the LAN, instant remote management is created.

Server rooms look to KVM technology to eliminate extra equipment (keyboards, monitors, mice) so they can save space critical to effectively managing their data centers.

In the past, KVM switches provided administrators with the benefit of consolidating the control of their many servers. By connecting directly to the KVM ports of a target device, they received direct analog control down to the BIOS level. While this may have satisfied the needs of some administrators to control multiple servers, enterprise users needed greater scalability, and needed to control these servers remotely.

With the KVM over IP technology used in switches today, the administrator can use the IP connections to control multiple servers from any remote location. The KVM switch provides BIOS-level access and control of multiple server racks from a single console, and allows the administrators to control the servers from remote locations.

## **Analog KVM**

- Centralized the KVM control functionality from a single station
- Administrators could manage a rack full of servers with one keyboard, one mouse and one video output
- Simplified the server interface and reduced the cost of having duplicates of such peripherals

## **Digital KVM**

- Allowed a special cable (usually CAT5 or USB) to carry the digitally mastered analog data
- Provided remote capability over Analog KVM, including the move of KVM data to a remote location for manageability
- Saved administrators a trip to the server room, gained control of a server and did not lose centralized features offered by the Analog KVM
- Ideal for a SOHO or LAN environment, this caused a roadblock in large organizations to remotely manage a server

## **KVM over IP**

- With the lack of Internet accessibility in Digital KVM, *IP-enabled KVM was created*
- Enabled administrators to reach the server from anywhere in the world using Internet or WAN