

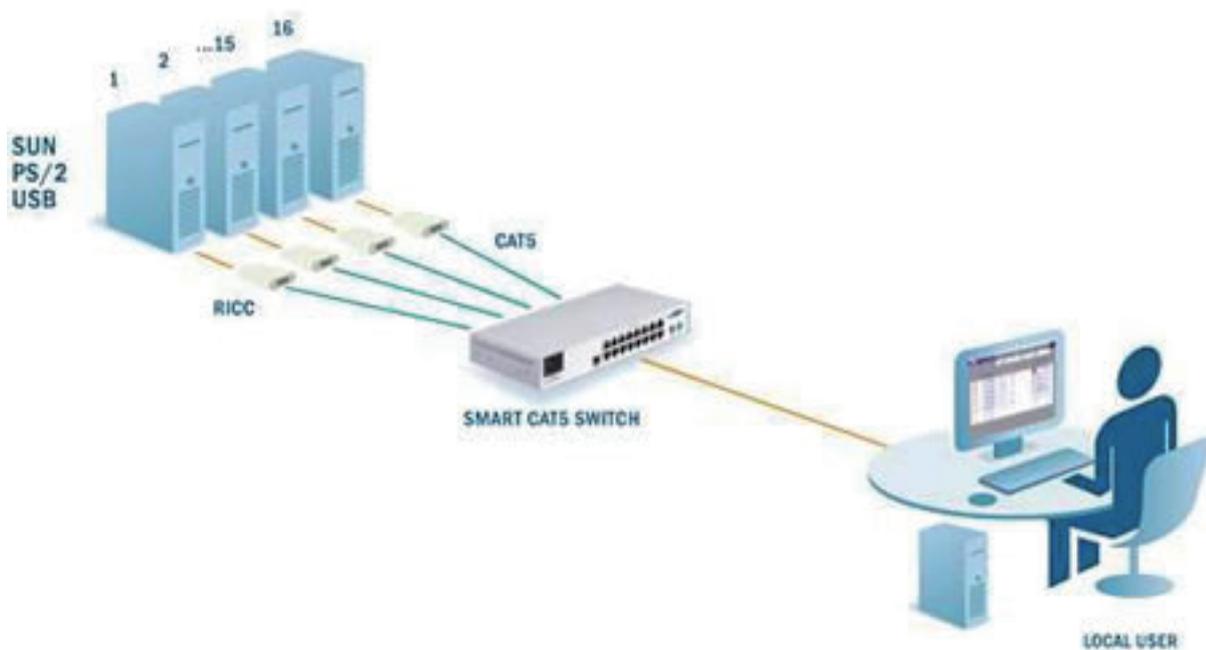
White Paper

KVM Switches

Overview

Keyboard, video, and mouse (KVM), is an industrial instrument that allows users to control numerous amounts of computers all at the same time starting at keyboards, video monitors and the mouse. This piece of machinery brings productivity at its finest.

When the time of the computer industries rose in the 80's, companies and data centers were faced with problems that dealt mainly with the space limitation of hundreds of computers. They had to find an efficient way to manage space. So to solve these problems, the demand for a device that allows people to access multiple central processing units with one source was on the rise. Now for more than twenty years the technology KVM switch was integrated in the industry to combat this problem that was taking up valuable space, time, and money.



Benefits of Using KVM Switch

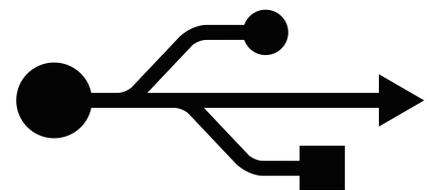
Supervising hundreds and even thousands of computers is a needless hassle that brings inconvenience to the industry. Using a KVM switch transforms the workforce to in its productive nature to conserve time, space, and money. The switch allows users to connect from one system to any computer while accessing data in real time. The keyboard, mouse, and video monitor are all connected to the KVM switch. This allows users to use a single set of keyboard, video monitor and mouse instead of supplying a set for each individual computer that ultimately takes up a whole lot of space and money. The switch is ideal and convenience that meets the needs for business that needs to manage and access numerous amounts of servers and CPU's productively. As an entirety, because there are less keyboards, monitors, and mouse consoles, less power would be utilized, thus lowering your electrical bills dramatically. Furthermore, using the switch can decrease the number of server racks and server cabinets and saving a lot of ground space.

KVM switches are indeed excellent for data processing centers but it's far more flexible in its tasks. These switches are also ideal in hospitals that require doctors to conveniently monitor a patient's status or sharing information to different locations.

Understanding the Types of KVM Switches

USB

- This type of switch manages the connections of keyboard and mouse through USB cables.
- It features the capability to share wireless keyboard and mouse connectivity and audio as well.



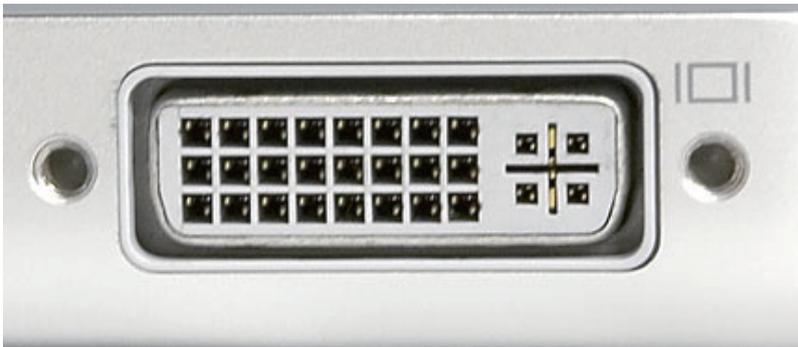
HDMI

- HDMI KVM switch offers high resolution and used for connecting monitors that support HDMI.

- Great for professional presentations, home theatres, and areas that would require HD display connectivity.
- Ability to switch between two or more computers with a single KVM.
- The switches support 480i, 480p, 720p, 1080i and 1080p video modes.

DVI

- The Digital Visual Interface, an improvement from VGA offers connectivity in higher resolution and graphics and supporting different system arrangements.



Display Port

- The switch supports a display port which is generally used as internal connection replacing DVI and VGA. Supports multiple displays and accessing many devices.

Multi-Display

- Displays in VGA, DVI, HDMI and Display port, allowing access of multiple programs and productively sharing data

Rack Consoles

- Going from rack to rack is a hassle. The switch allows users to operate at the server cabinet. Necessary KVM support to save rack space.

KVM over IP

- Switches used for connectivity over internet and LAN use, allowing users to control all CPU's and servers.

Multi User

- “A multi-user switch will allow simultaneous access to the switch by more than one user from multiple locations.”

Analog Verses Digital KVM Switches

Digital KVM

One of the perks of incorporating digital KVM technology is its ability to work with other network infrastructures. Just plant a switch, plug it in, and run the setup procedures. With digital KVM, users experience more time and cost efficiency. KVM switches are generally used to control more than one computer at a time, however with digital technology, KVM switches can be integrated to serially controlled routers. Digital KVM switches allow users to access data without any limitations in its distance, and collaborate with other users on the same PC.



The more servers there are, the more demand in digital KVM switches. Even if space is a crucial issue, digital KVM switches can be integrated anywhere else where there are extra computers. They don't have to be in the same room to function like a normal KVM switch.

With more digital switches on the rise to keep up with all the servers, users can now authorize a single IP address to be identical to all of the KVM switches, thus eliminating valuable time monitoring the IP address of each one, especially if these switches are spread out over multiple locations.

Analog KVM for Mission Critical Tasks

Most users incorporate analog KVM due to its promising benefits as well over digital. It features a smart server module, CAT5. CAT5 has a built in memory and provides quality resolution by decreasing cable clutter. Analog technology does all of this in defense with its unique high security features.

One of the key benefits of analog is the reduction of connection blocking. This usually occurs when too many computers are connected to a KVM switch and thus resulting in not enough links back to computers. However, one thing to consider, users will have to monitor a large array of different IP addresses depending on how widely spread out these analog switches are in relation to one another.

Analog technology gives fast response time to your KVM switch. Something that sets them apart from digital KVM switches is their ability to support higher video quality. Because there is no need for analog KVM to compress a video like digital KVMs, the response time is almost instant.

Conclusion

KVM switches should be incorporated for maximizing reliability and productivity in the industrial world. Space can be a major issue, especially in large data processing centers. But with the aid of keyboard, video and mouse technology, these switches can combat these problems and save energy performing these tasks as well. Now that the KVM switches are more popular than ever, choosing the right ones between analog and digital KVM are critical for ensuring effective connections, smarter management of files, and more reliable integrations with your servers.