# **APC KVM Switches**



APC CAT5 analog and IP KVM switches integrate Keyboard, Video and Mouse (KVM) access, APC power control and external modems to provide access to critical IT equipment - even when network and operating systems are down. Leveraging just one keyboard, monitor, and mouse also reduces energy expenses and hardware costs, simplifies cabling, and frees up space within the IT environment. Because they connect directly to the keyboard, monitor, and mouse ports (commonly referred to as 'Out-of-Band'), APC IP KVM switches allow users to troubleshoot servers and diagnose problems through POST and BIOS-level access at any location from anywhere in the world. This minimizes downtime by providing local and remote secure access to connected Windows, Sun, and Linux/Unix servers. All IP KVM switches are IPv6/IPv4 network compatible and support Virtual Media - and if cascaded together, allow access for up to 512 servers. All APC KVM switches are supported by APC Network Access Software and InfraStruxure® Central and provide integrated power management with APC Switched Rack PDUs.

- Reduces Mean Time To Recovery (MTTR) by monitoring health to predict failures, diagnose issues remotely and to restore to working operation quickly.
- Expands control by providing access through a single interface anywhere and at anytime - as if you were right there.
- Improves availability by reducing unscheduled downtime through predictive monitoring and leveraging centralized technical expertise easily.
- Increases agility by speeding deployment, ensuring a high degree of system compatibility, and by adapting to changing requirements easily.
- Lowers Total Cost of Ownership (TCO) by reducing on-site visits that minimize maintenance costs, and protect investments without the need for additional products or training.
- Extends security by restricting access using directory authentication, encrypting sensitive information 'on-the-wire' and tracking administration activity.

Virtual Media¹ saves time and improves security by mapping CD-ROMs and other storage media to a remote server without leaving the office. For example, you can redirect your local media (USB, CD, Local drive etc) to the remote server, perform application and OS patches remotely and reboot the server to a local image for diagnostic purposes.



### **Out-of-Band Management Access**

Instant, on-demand device access reduces response time, improves efficiency, and maximizes uptime.

## **Use Existing Microsoft RDP and VNC Services**

Intelligent switching from remote desktop protocol (RDP) and virtual network computing (VNC) sessions to KVM over IP.



#### Simplified Cabling

APC CAT5 Analog and IP KVM switches offer simplified cabling using server modules and CAT5 cabling.

### **Streamlined Remote Software Maintenance**

Virtual Media¹ allows technicians to take care of routine maintenance and address server problems without getting up from their desks.

## **Enhanced Security Framework**

Integration with authentication servers and existing security infrastructure.

## **Flexible Administration Tools**

Integrated Web Interface and APC Network Access Software provide browser-level access and an intuitive split screen interface for easy discovery, navigation and management of APC IP KVM and CAT5 switches.

## **APPLICATIONS**

#### Who?

Data Center Managers
(Windows/Linux Server Administrators)

Telecom Managers

Ability to access out-of-band information, configure changes, receive alarms, and system messages.

Remote access to configure changes,

monitor system, update/patch software

Test Lab Managers

Setup and maintain testing environments, perform tests with real-time video.

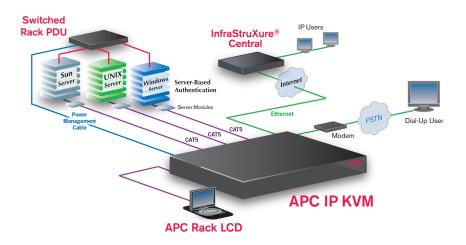
#### Where?

Anywhere there is a need to manage more than one server within a rack and a desire to minimize the number of monitors, keyboards, and mice needed to manage the environment.

## **APC KVM SWITCH PRODUCTS**

AP5602 AP5610 AP5615 AP5616	APC 16-Port CAT5 Analog KVM APC 16-Port IP KVM (2 IP users) APC 32-Port IP KVM (2 IP users) APC 32-Port IP KVM (8 IP users)
AP5630 AP5631 AP5632 AP5634 AP5635 AP5636 AP5640	APC KVM PS/2 Server Module APC KVM USB Server Module APC KVM SUN Server Module APC KVM USB VM Server Module APC KVM USB VM Server Module APC KVM PS/2 VM Server Module APC KVM VT100 Serial Server Module APC Power Supply for AP5636
AP5641	APC KVM Power Management Cable

Note<sup>1</sup> – Virtual Media requires USB or PS/2 VM Server Module for each server to work.



## **KEY APC DIFFERENTIATORS**

## **Integrated Power Management**

Power management of APC Switched Rack PDUs allows the IT administrator to power on, power off, and power cycle any connected server from the IP KVM user interface.

## **Supports Remote Software Updates/Patches**

Virtual Media¹ allows users to remotely install software, patch applications and the OS, and perform diagnostic testing.

## APC InfraStruXure® Central Support

APC's InfraStruXure Central allows customers to discover and manage APC KVM switches, with support for both public and private InfraStruXure® Central networks.

## Intelligent Switching from RDP/VNC Sessions to KVM over IP

When Windows-based servers are down or become disconnected from the IT production network, the IP KVM integrates with Microsoft RDP and VNC for intelligent switching.

## **FACTORS TO CONSIDER**

## **AVAILABILITY**

## Do you worry about your servers going down and no means to access them?

Access is available locally at the rack or remotely through an Ethernet network. Remote
access from any IP connection gives complete control of the server graphical interface.

## How do you access remote servers?

Secure remote administration tools allow you to troubleshoot, patch and restore IT assets
across the enterprise, whether they are close at hand or far away. APC KVM switches provide a comprehensive, remote administration system with enterprise-class security and a
single, consolidated user interface. Access is available through the integrated Web-based
user interface, APC Network Access Software and APC's InfraStruXure® Central.

## **SECURITY**

## Do you worry about who has access to your servers and networking equipment?

An enhanced security framework integrates with existing security infrastructure and supports enterprise security standards. Video, mouse, and keyboard strokes and virtual media sessions are encrypted for secure communications over public networks.

## What types of authentication are supported?

• Local, LDAP, and Active Directory, authentication are supported.

## **REGULATORY COMPLIANCE**

# Do you worry about Sarbanes-Oxley compliance and identifying who is accessing your information?

 Local and remote data and user access logging provide secure auditing via SNMP events to comply with Sarbanes-Oxley.

#### **USER**

- Secure browser-based interface
- Multibrowser support (IE, Mozilla Firefox)
- Multiplatform client support (Windows, Mac OS X, Linux, Solaris)
- Scalable video sessions

### **SECURITY**

- User access control
- Local login for increased security
- Individually selectable keyboard, mouse, video and Virtual Media encryption (DES, 3DES, 128bit SSL, AES)
- Switch-based LDAP and Active Directory authentication

### **SERVER ADMINISTRATION**

- Access through the Web-based user interface, APC Network Access Software and APC's InfraStruXure® Central
- Support for port name assignment
- Simultaneous access on the same port (port sharing)
- Cascading with centralized port management (access and configuration)
- Programmable cycling of screens
- Support for VGA resolutions up to 1280 x 1024 @ 75Hz
- Optional power management with APC Switched Rack PDUs
- · Cascading for up to 512 servers

### VIRTUAL MEDIA<sup>1</sup>

- Redirect local media (USB, CD, Local drive etc) to remote server
- No additional software required on remote server
- Works out of the box (requires a USB or PS/2 Server Module for each server)
- Encrypted session for the most demanding environments
- Performance up to 12x CD-ROM Speed
- Supports up to 8 simultaneous connections (dependent on IP KVM model)

## **SYSTEM MANAGEMENT**

- Web-based management interface and APC Network Access Software
- Integrated power management with APC Switched Rack PDUs
- APC InfraStruXure® Central support

## **CABLING**

- CAT5-based server modules
- Compatible with PS/2 and USB keyboard/mouse interfaces
- . Support for CAT5, CAT5e, CAT6, and CAT7 UTP cabling

# WARRANTY

- 2-year repair/replace
- 1 year extended warranty available for purchase

# KEYBOARD VIDEO MOUSE SWITCH VS. CONSOLE PORT SERVER

- KVM switches are used to access servers that use a graphical user interface (GUI)—based OS like Windows.
- Console port servers are used to access devices that use a command line interface (CLI) like UNIX/Linux servers and network devices such as routers, switches, firewalls, and UPSs.