K504E-SH

4-Port Secure KVM Switch with DisplayPort

Smart SECURITY LABS

Manage KVM operations on four computers with the latest in security features and Remote Desktop Controller functionality

FEATURES

- Validated to EAL 4+ security standards
- Complies with Common Criteria Protection
- Profile 2.1
- Manage four connected computers in isolation
- Advanced scaling enables no quality loss
- Unidirectional data paths
- Dedicated processors for emulation
- Includes DisplayPort security protocols
- USB port protection
- Remote Desktop Controller
- CAC Port

APPLICATIONS

- Government Operations
- Defense Applications
- Security Control Rooms
- Corporate Communications and Server Operations
- Medical Campuses
- Airports

HD ready 1080p

Smart SECURITY LABS

A partnership between SmartAVI and High Sec Labs

THE ULTIMATE IN SECURE KVM

The K500 series are the only secure KVM switches available today that features DisplayPort functionality, which delivers the most protections and separations between connected computers on the market. By using an ultra-secure form of packetized data transmission, a technology found in Ethernet, USB and PCI applications, this KVM switch eliminates points of vulnerability that have plagued other KVM units.

With four connected computers, the K504E offers impressive levels of seamless communications even when connecting computers that are on different levels of security clearance and Internet access. The K504E utilizes unidirectional optical data-diodes which insulates all connections from any possible points of data leakage among peripherals. Also included is an auxiliary channel firewall, providing further protection from internal security weaknesses. Every K504E secure KVM switch is rigorously and extensively tested to ensure it will remain stalwart against any known form of KVM security attacks. The unit has been certified to meet EAL 4+ standards to assure it provides the highest level of security possible.
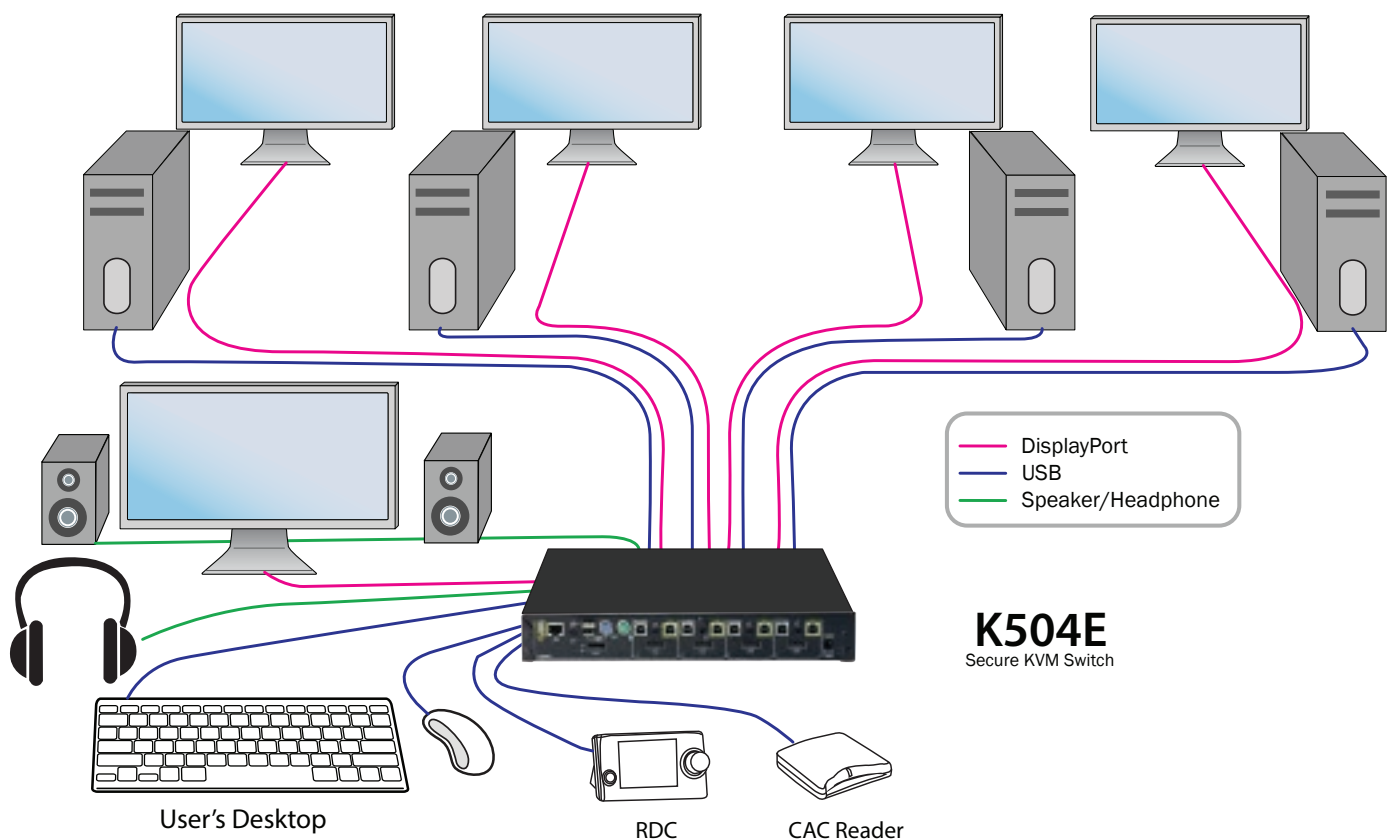
The K504E is an essential tool for users challenged by frequent switching between isolated networks. This product resolves challenges of virtualization while adding additional security protections. The RDC (Remote Desktop Controller) port enables simple interface with the RDC controller. Using the K504E with RDC, users can control and monitor KVM functions remotely and securely.

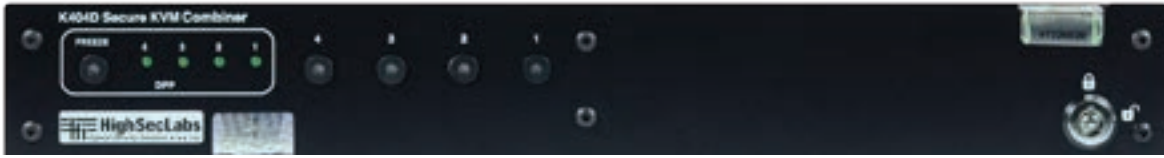## DISPLAYPORT – THE LATEST IN KVM SECURITY

The K504E eliminates the documented vulnerabilities of other so-called secure KVM devices sold in the market today related to data leakages between connected computers with different security levels. The K500 Series are the only secure DisplayPort KVM devices on the market that are compatible with DisplayPort version 1.2.

This product offers the highest possible separation between four connected computers. The K504E uses unidirectional optical data diodes to prevent any potential leakage between the highly-isolated peripheral channels. This KVM can also be used to securely filter and lock USB ports preventing data export / import through mass-storage devices by hardware. The K504E also features patented auxillary channel firewall that designed to protect from DisplayPort internal security vulnerabilities.

APPLICATION DIAGRAM

DisplayPort
USB
Speaker/Headphone

K504E
Secure KVM Switch

User's Desktop

RDC   CAC Reader

SPECIFICATIONS

K504E-SH Front

K504E-SH Rear

VIDEO	
Host Computer Input Ports	4 input ports, each including 1 DisplayPort Female connectors for video input, 1 USB Type-B connector for key-board and mouse, 1 USB Type-B connector for user authentication device, 1 Audio input 3.5 mm stereo jack
Console Ports	1 DisplayPort Female Connector, 2 USB Type-A jacks for keyboard and mouse, 1 USB Type-A jack for user authentication device, 1 RS-45 jack for remote desktop controller and 1 Audio output 3.5 mm stereo jack
Management	Channel select/status LEDs, channel select push-buttons, keyboard hotkeys (optional – can be disabled)
Video Modes Supported	All DisplayPort 1.2 resolutions up to 3840x2160 x30 bpp @60 Hz Supports 17.28 Gbits @ a 4-lane link
Security Functions	USB ports supporting only keyboard and mouse through host emulation and strong filtering Patented AUX channel firewall Optical Data Diode assures unidirectional flow from devices to computers Changing Firmware (on ROM) cannot cause leakage between channels or data export Isolated power supplies for each device emulator Battery powered anti-tampering system to disable product in case of mechanical intrusion Special holographic Temper Evident Labels
Power	DC input 12V/1A maximum Wall-mounted power supply included. Power input 90-240V AC
Peripheral Security	USB ports supporting only keyboard and mouse through host emulation Data-diode assures USB unidirectional flow from devices to host Firmware change can not cause leakage between channels or data export
Environmental	Temperature range: Operating - 0ºC to 40ºC (32ºF to 104ºF); Storage - -20ºC to 60ºC (-4ºF to 140ºF) Humidity: Operating - 20 to 80% non condensing; Storage – 10 to 90% non condensing Altitude: 0 to 10,000 ft
Regulatory Compliance	Safety: UL/cUL60950,EN60 950 EMI/EMC: FCC Class B, CE Mark, EN55022B, VCCI
Security Accreditations	Common Criteria EAL 4+ certified ALC_FLR.3 certified Designed for Common Criteria EAL-5 Complies with latest NIAP Peripheral Sharing Switch (PSS) For Human Interface Devices Ver 2.1
Physical Characteristics	Dimensions: 32(D) x 135 (W) x 33 (H) mm / 12.6 (D) x 5.3 (W) x 2.0 (H) in Device weight: 1.5 Kg (3.3 lbs) Shipping Weight: 1.8 Kg (4 lbs) without cables

ORDERING INFORMATION	
Part No.	**Description**
K504E-SH	4-Port Secure KVM Switch with DisplayPort

Smart
SECURITY LABS
A partnership between SmartAVI
and High Sec Labs