



SECURE SINGLE-HEAD KVM SWITCHES

View and control multiple computers using a single set of keyboard, video, and mouse peripherals.

HSL's Keyboard/Video/Mouse Switch allows a single workstation to control multiple computers. This frees up space, reduces clutter, and eliminates the need to

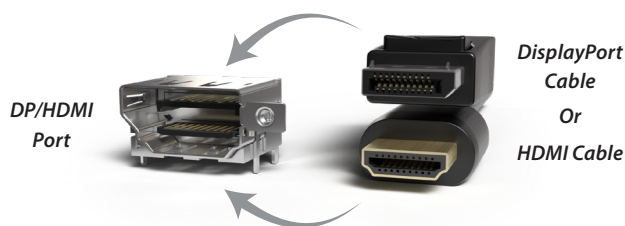
purchase and install dedicated sets of peripheral devices for each computer.



NIAP PP PSD 4.0
 CERTIFIED
 COMMON CRITERIA

KEY FEATURES

- **NIAP Common Criteria PP4.0 Compliant:**
 HSL's Secure KVM Switch models are certified for the latest NIAP Common Criteria Protection Profile version 4.0 (PP4.0) for Peripheral Sharing Devices (PSD).
- **Prevent Information Leaks:**
 Prevent threats derived from sharing and switching of vulnerable, untrusted, or unauthorized peripheral devices. Block peripheral exploits, information leaks, signal transmissions, and computer malware. Prevent hardware and firmware tampering attacks by enforcing multi-layered security mechanisms.
- **Filter USB Peripherals (U):**
 Block unauthorized USB devices while allowing secure switching of smart card and biometric authentication devices between computers. Whitelist and blacklist specific USB devices based on VID/PID characteristics.
- **DP/HDMI Combo Connectors:**
 The KVM features combo connector ports that support both DisplayPort and HDMI cables.



SECURITY FEATURES

- **USB Security**
 - Block unauthorized USB devices.
 - USB authentication devices are authorized by default.
 - Whitelist and blacklist specific USB devices based on VID/PID characteristics.
- **Video Security**
 - Computer video input interfaces are isolated using different electronic components, power, and ground domains.
 - The display is isolated by a dedicated, read-only EDID emulation for each computer.
 - Access to the monitor's Extended Display Identification Data (EDID) is blocked.
 - Access to the Monitor Control Command Set (MCCS commands) is blocked.
- **Keyboard & Mouse Security**
 - The keyboard and mouse are isolated by a dedicated USB device emulation for each computer.
 - Unidirectional optical data diodes enforce one-way, peripheral-to-computer data flow.
 - Communication from computer-to-keyboard/mouse is blocked.
 - Non-HID (Human Interface Device) data transaction is blocked.
- **Audio Security**
 - Enforce computer-to-speaker, one-way flow of sound through unidirectional diodes.
 - Prevent eavesdropping and line-in re-tasking by blocking speaker-to-computer communication.
- **Hardware Anti-Tampering**
 - Special holographic tampering evident labels on the product's enclosure provide a clear visual indication if the product has been opened or compromised.
- **Firmware Anti-Tampering**
 - There is no access to the product's firmware or memory through any port.
 - Firmware is permanently stored on a non-reprogrammable Read Only Memory (ROM) to prevent any modification.
 - Firmware integrity is verified through a self-test procedure during power-up. Upon detection of a critical failure, the device disables normal operation and provides a clear visual indication of failure.

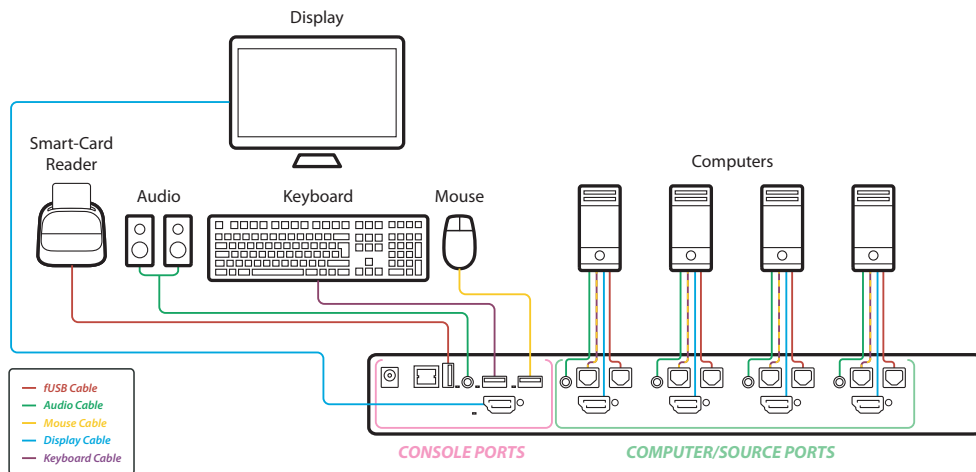


OPERATIONAL HIGHLIGHTS

- View Video in Ultra HD:**
 The KVM Switch can display video at resolutions up to 4K 60Hz for uncompromised quality.
- Flexible Installation:**
 Seamlessly mix HDMI and DP sources and displays without the need for external converters or adapters.
- Switch Between KVM / KM Functionality for Various Setups:**
 The KVM Switch can be configured in two modes: KVM Mode and KM Mode. KVM Mode (default) shares a single set of video, keyboard, and mouse between all computers. KM Mode only shares the keyboard and mouse, while each computer connects to its own display. This versatility allows for a wide variety of configurations.

SPECIFICATION

PART NUMBER	SK21PH-4	SK41PH-4	SK41PHU-4/4T	SK81PH-4
No. of Sources	2	4	4	8
CONSOLE PORTS				
Displays	1 x DP/HDMI	1 x DP/HDMI	1 x DP/HDMI	1 x DP/HDMI
Max Resolution (Input & Output)	Supporting UHD 4K resolutions up to 3840x2160 @ 60 Hz			
Mouse and Keyboard	USB 2.0 Type A	USB 2.0 Type A	USB 2.0 Type A	USB 2.0 Type A
Audio Jack	3.5 mm Jack	3.5 mm Jack	3.5 mm Jack	3.5 mm Jack
fUSB Port	N/A	N/A	USB Type A (U)	N/A
COMPUTER PORTS				
Display Type	2 x DP/HDMI	4 x DP/HDMI	4 x DP/HDMI	8 x DP/HDMI
Mouse and Keyboard	USB 2.0 Type B	USB 2.0 Type B	USB 2.0 Type B	USB 2.0 Type B
Audio Jack	3.5 mm Jack	3.5 mm Jack	3.5 mm Jack	3.5 mm Jack
fUSB Ports	N/A	N/A	USB Type A (U)	N/A
PHYSICAL				
Dimensions	177 x 82 x 35 mm / 7 x 3.2 x 1.4 inches	342 x 148 x 42 mm / 13.7 x 5.8 x 1.7 inches		440 x 192 x 48 mm / 17.3 x 7.5 x 1.9 inches
Weight	0.52 kg (1.1 lbs)	1.6 kg (3.2 lbs)		2.6 kg (5.7 lbs)
POWER				
Power Requirements		12V DC, 1.5A		35W Max
AC Input		100 to 240V AC		100 to 240V AC
Power Type		External		Internal
ENVIRONMENTAL				
Operating Temp.		32° to 104° F (0° to 40° C)		
Storage Temp.		-4° to 140° F (-20° to 60° C)		
Humidity		0-80% RH, non-condensing		
SOFTWARE				
Supported OS		Windows, MacOS, Linux		
CERTIFICATION				
Security Certification	NIAP PP4.0 Certified	NIAP PP4.0 Certified	NIAP PP4.0 Compliant, TEMPEST Certifiable (SK41PHU-4T)	NIAP PP4.0 Certified
Product Certification	CE, RCM, FCC class B, VCCI, TUV US, TUV Canada			
GENERAL INFO				
Manufactured	TAA / BAA Compliant			
Product life-cycle	10 years			
Warranty	2 Years			



HSL Single-Head 4-Port Secure KVM Switch System Diagram



ORDERING INFORMATION

Model Number	Part Number	Description	Qty
SK21PH-4	CPN19474	Secure 2-Port KVM Switch, DP/HDMI, PP 4.0 Certified	1
		Wall-Mounted 12V DC Power Source	1
SK41PH-4	CPN19252	Secure 4-Port KVM Switch, DP/HDMI, PP4.0 Certified	1
		Wall-Mounted 12V DC Power Source	1
SK41PHU-4	CPN19257	Secure 4-Port KVM Switch w/Filtered USB, DP/HDMI, PP4.0 Compliant	1
		Wall-Mounted 12V DC Power Source	1
SK41PHU-4T	CPN31824	Secure 4-Port KVM Switch w/Filtered USB, DP/HDMI, PP4.0 Compliant, TEMPEST Certifiable	1
		Wall-Mounted 12V DC Power Source	1
SK81PH-4	CPN19261	Secure 8-Port KVM Switch, DP/HDMI, PP4.0 Certified	1
		C13 Female to C14 Male Power Cable	1
		8/16-Port Rack Mount Kit	1
		Adapters Kit- Plugs UK/USA/AU/EU to ERC230/C13	1



SK21PH-4



SK41PH-4



SK41PHU-4 / 4T



SK81PH-4

