



# RUGGED AND SECURE KEYBOARD, VIDEO, MOUSE SWITCHES

Product Family

# SECURE MIL-STD TEMPEST

## 4/8-PORT HDMI KVM SWITCHES

HSL's DP/HDMI rugged and secure KVM Switches, provide military users with superior security under the most challenging of environmental conditions.

These are the only KVM switches and combiners in the world that are both **NIAP PP 4.0 compliant**, **MIL-SPEC-810G compliant** and **TEMPEST Level A compliant**. They are designed to be installed on military vehicles, marine vessels and airborne platforms.

### REMOTE CONTROLS

For easier mounting and better situational awareness, the rugged KVMs are optionally equipped with a remote control that can be mounted on the operator dashboard.



### RUGGED EXTENDERS

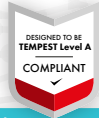
Facilitates installations where users and hosts are distant from each other. Works over both copper and fiber. Compatible with remote control for complete functionality.

Transmitter & Receiver  
Rugged Extender



## RUGGED SECURE 4/8/16 PORTS

### KVM COMBINER SWITCHES SPECIFICATIONS



MODEL	SC42PHU-4TR	SC82PHU-4TR**	SC162PHU-4TR**
No. of Sources	4	8	16
MAIN FEATURES	<b>Console Output Ports</b>	2 x DP/HDMI, Mouse, KB, CAC reader and optional remote control via a single male D38999/24WD35SN	
	<b>Computer Input Ports</b>	2 x DP/HDMI, HID and CAC interfaces based on a single female D38999/24WD35PN.	
	<b>Channel Switching</b>	<ul style="list-style-type: none"> <li>• IP 67 compliant green LED illuminated front panel push buttons</li> <li>• NVG and dimming options available</li> <li>• Remote control connected via console port</li> </ul>	
	<b>Video Modes Supported</b>	• DisplayPort/HDMI supported up to 4K@30Hz or 3440x1440@60Hz	
PWR	<b>DC Input</b>	Nominal Power Input 28VDC (18V-36V)	
	<b>Power Requirements</b>	Max Power Consumption 40W	
PHYC	<b>Dimensions</b>	433.8 x 215 x 65.85 mm / 17 x 8.5 x 2.6 in	
CERT	<b>Security Certification</b>	Compliant with NIAP PP4 for PSD (Peripheral Sharing Device) TEMPEST Level A Compliant *	
	<b>Product Certification</b>	UL/cUL60950, EN60 950, FCC Class B, CE Mark, EN55022B, VCCI, CE102, CS101, CS114, CS115, CS116, RE102, RE103, CE101	
RELIAB	<b>Standards</b>	MIL-STD-810G, MIL-STD-1275E Compliant	
	<b>MTBF</b>	65,000 hours of operation at 40 degrees	

\*\* Coming Soon.

## RUGGED SECURE 4/8 PORTS

### KVM AND MINI-MATRIX SWITCHES SPECIFICATIONS



MODEL	SK41D-4TR	DK82PHU-4TR	SX82PHU-4TR**
No. of Sources	4	8	8
MAIN FEATURES	<b>Console Output Ports</b>	2 x DP/HDMI (SK41D-4TR HDMI only), Mouse, KB, CAC reader (not for SK41D-4TR) and optional remote control via a single male D38999/24WD35SN	
	<b>Computer Input Ports</b>	2 x DP/HDMI (SK41D-4TR HDMI only), HID and CAC interfaces (not for SK41D-4TR) based on a single female D38999/24WD35PN.	
	<b>Channel Switching</b>	<ul style="list-style-type: none"> <li>• IP 67 compliant green LED illuminated front panel push buttons</li> <li>• NVG and dimming options available</li> <li>• Remote control connected via console port</li> </ul>	
	<b>Video Modes Supported</b>	<ul style="list-style-type: none"> <li>• DisplayPort/HDMI supported up to 4K@30Hz or 3440x1440@60Hz</li> <li>• DVI-D 1920x1200@60Hz (SK41D-4TR), Support for other video formats available.</li> </ul>	
PWR	<b>DC Input</b>	Nominal Power Input 28VDC (18V-36V)	
	<b>Power Requirements</b>	Max Power Consumption 40W	
PHYC	<b>Dimensions</b>	320 x 141 x 50 mm / 12.5 x 5.5 x 1.9 in	448 x 163 x 101 mm / 17.6 x 6.4 x 4 in
CERT	<b>Security Certification</b>	Compliant with NIAP PP4 for PSD (Peripheral Sharing Device), TEMPEST Level A Compliant *	
	<b>Product Certification</b>	UL/cUL60950, EN60 950, FCC Class B, CE Mark, EN55022B, VCCI, CE102, CS101, CS114, CS115, CS116, RE102, RE103, CE101	
RELIAB	<b>Standards</b>	MIL-STD-810G, MIL-STD-1275E Compliant	
	<b>MTBF</b>	65,000 hours of operation at 40 degrees	

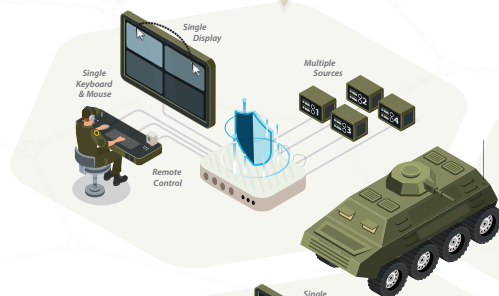
\* Contact us for further information regarding TEMPEST capabilities. \*\* Coming Soon.

SC42PHU-4TR Front & Rear View

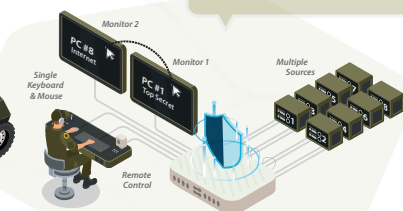


## RUGGED SYSTEM DIAGRAMS

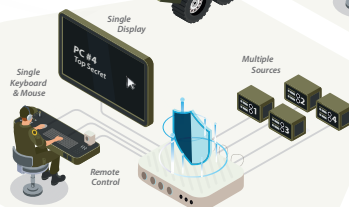
**SC42PHU-4TR**  
SECURE RUGGED  
KVM COMBINER SWITCH



**SX82PHU-4TR**  
SECURE RUGGED  
MINI-MATRIX KVM SWITCH



**SK41D-4TR**  
SECURE RUGGED  
KVM SWITCH



# RUGGED KVM

## HIGHLIGHTS

- **Rugged Construction**

The rugged KVM is designed to meet MIL-STD harsh environmental requirements. It features a robust sealed aluminum enclosure, all metallic MIL-STD-38999 connectors, and sealed front panel illuminated push buttons.

**NIAP PP4.0 for PSD Compliant - All of HSL's rugged KVM switches are compliant with or certified to NIAP PP version 4.0 for PSD.**

- **Rugged KVM Multi-Viewers**

View and interact with up to 16 hosts and one or two displays. A streaming H.264 output can be used as one of the display outputs. Easily switch between multiple sources and scale images to create custom views that can be saved as presets.

- **HSL's Unique Mini-Matrix Option**

Allows a single user to control two of the connected hosts simultaneously.

- **Protected Power Input**

Input power from 12-28VDC that is fully compliant with MIL-STD-1275E. Optional High Radiation Nuclear events protection is available.

- **Easy Mounting**

All products include side-to-side mounting holes for easy mounting while maintaining the chassis seal.

- **Extensive BIT (Built-In-Test) Functionality**

Receive status and diagnostics via RS232 regarding the unit's operational readiness. BIT results are reported upon startup, on demand and continuously every 5 minutes.

- **TEMPEST Compliant**

Compliant with the latest TEMPEST Level A standard.

**SK41D-4TR IS BOTH NIAP PP4 FOR PSD COMPLIANT AND MIL SPEC 810G COMPLIANT.**



SK41D-4TR Rear View



# SECURE KVM

## RUGGED MODELS

MODEL	SK41D-4TR	SC42PHU-4TR/ SC82PHU-4TR/ SC162PHU-4TR	DK82PHU-4TR	SX82PHU-4TR
MAIN FEATURES				
Description	Secure 4-Ports Rugged KVM Switch	Secure 4/8/16-Ports Rugged KVM Combiner Switch	Secure Dual-Head 8-Ports Rugged KVM Switch	Secure 8-Ports Rugged Mini-Matrix KVM Switch
No. of Sources	4	4/8/16	8	8
Displays	1 x HDMI	2 x DP/HDMI	2 x DP/HDMI	2 x DP/HDMI
DPP Support	No	Yes	Yes	Yes

MADE IN THE USA,  
BAA AND TAA COMPLIANT.



**HIGH SEC LABS (HSL)**  
DEVELOPS HIGH-QUALITY  
CYBER-DEFENCE SOLUTIONS FOR  
PROTECTING NATIONAL ASSETS AND  
INFRASTRUCTURE IN THE FIELD OF  
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