KVM
COMBINERS

HighSecLabs
Highest Security Solutions
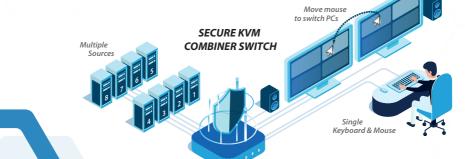
COMBINER SWITCHES
KVM + MULTIVIEWR + SCALER

Interact with multiple computers presented on the same display using a single set of USB, audio, keyboard, video and mouse peripherals.

SC162PH-4

The Combiner switch increases productivity in challenging multi-computer environments where users are required to view and interact with several computers simultaneously.

HSL'S COMBINER SWITCH
ENABLES USERS TO:

- View all computers on one or two displays. The Combiner functions as a KVM switch, a scaler, and a multi-viewer – all in one.

- Switch the mouse and keyboard control freely between all computers.

- Create custom view modes and quickly switch between them for easy interaction with the environment.

Move mouse to switch PCs

Multiple Sources

SECURE KVM COMBINER SWITCH

Single Keyboard & Mouse

ON-SCREEN DISPLAY (OSD)
COMBINER SETTINGS

Easily configure what you want to see using the OSD

SECURE 4/8/16-PORTS COMBINER
SPECIFICATIONS

	MODEL	SC42PHU-4	SC82PH-4	SC162PH-4	SC44PHU60-4**
	No. of Sources	4	8	16	4
CONS. PORTS	**Displays**	2 x HDMI	2 x DP/HDMI	2 x DP/HDMI	4 x DP/HDMI
	Mouse & KB	USB Type A	USB Type A	USB Type A	USB Type A
	Audio Jack	3.5 mm Jack	N/A	N/A	3.5 mm Jack
	fUSB Port	USB Type A	N/A	N/A	USB Type A
COMP. PORTS	**Display Type**	DP/HDMI	DP/HDMI	DP/HDMI	DP/HDMI
	Max Resolution	UHD 4K up to 3840x2160			4K@60Hz
	Mouse and KB	USB Type B	USB Type B	USB Type B	USB Type B
	Audio Jack	3.5 mm Jack	N/A	N/A	3.5 mm Jack
	fUSB Port	USB Type B	N/A	N/A	USB Type B
PHYS	**Power Reqs.**	35W Max, 100 to 240V AC, Internal			
	Dimensions	342 x 148 x 42 mm (13.4 x 5.8 x 1.6 in)	439x250x58 mm (17.3x9.8x2.3 in)	439x222x89 mm (17.3x8.7x3.5 in)	342 x 158 x 57 mm (13.4 x 6.2 x 2.2 in)
	Weight	1.61 kg (3.5 lbs)	3.7 kg (8.1 lbs)	7.0 kg (15.4 lbs)	1.95 kg (4.3 lbs)
CERT	**Security Cert.**	Compliant with NIAP Common Criteria PP4.0 for PSD devices			
	Product Cert.	CE, RCM, FCC class B, VCCI, TUV US, TUV Canada			

** Coming Soon.

4/8 PORTS COMBINER
SPECIFICATIONS

	MODEL	SC42PHU-N	SC82PHU-N	SC44PHU60-N**
	No. of Sources	4	8	4
CONSOLE PORTS	**Displays**	2 x HDMI	2 x DP / HDMI	4 x HDMI
	Mouse & KB	USB Type A	USB Type A	USB Type A
	Audio Jack	3.5 mm Jack	3.5 mm Jack	3.5 mm Jack
	Microphone Jack	3.5 mm Jack	N/A	3.5 mm Jack
	USB Ports	4 x USB 3.0 Type A	USB 2.0 Type A	4 x USB 3.0 Type A
COMPUTER PORTS	**Display Type**	1 x DP / HDMI	1 x DP / HDMI	1 x DP / HDMI
	Max Resolution	UHD 4K up to 3840x2160		4K@60Hz
	Mouse and KB	USB Type B	USB Type B	USB Type B
	Audio Jack	3.5 mm Jack	3.5 mm Jack	3.5 mm Jack
	Microphone Jack	3.5 mm Jack	N/A	3.5 mm Jack
	USB Ports	USB 3.0 Type B	N/A	USB 3.0 Type B
PHYS	**Power Reqs.**	35W Max, 100 to 240V AC, Internal		
	Dimensions	342 x 148 x 42 mm (13.4 x 5.8 x 1.6 in)	439 x 250 x 58 mm (17.3 x 9.8 x 2.3 in)	342 x 158 x 57 mm (13.4 x 6.2 x 2.2 in)
	Weight	1.61 kg (3.5 lbs)	3.7 kg (8.1 lbs)	1.95 kg (4.3 lbs)

** Coming Soon.

RUGGED & SECURE
COMBINERS

The rugged Combiner is designed for 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.

4/8/16 PORT RUGGED & SECURE
COMBINER SPECIFICATIONS

DESIGNED TO **TEMPEST Level A** COMPLIANCE ✓

	MODEL	SC42PHU-4TR	SC82PHU-4TR**	SC162PHU-4TR**
	No. of Sources	4	8	16
MAIN FEATURES	**Console Output Ports**	2 x DP/HDMI, Mouse, KB, CAC reader and optional remote control via a single male D38999/24WD35SN		
	Computer Input Ports	2 x DP/HDMI, HID and CAC interfaces based on a single female D38999/24WD35PN.		
	Channel Switching	• IP 67 compliant green LED illuminated front panel push buttons • NVG and dimming options available • Remote control connected via Console port		
	Video Modes Supported	• DisplayPort/HDMI supported up to 4K@30Hz or 3440x1440@60Hz		
PWR	**DC Input**	Nominal Power Input 28VDC (18V-36V)		
	Power Reqs.	Max Power Consumption 40W		
PHYS	**Dimensions**	433.8 x 215 x 65.85 mm / 17 x 8.5 x 2.6 in		
CERT	**Security Cert.**	Compliant with NIAP PP4 for PSD (Peripheral Sharing Device) NATO TEMPEST Level A Compliant *		
	Product Cert.	UL/cUL60950,EN60 950, FCC Class B, CE Mark, EN55022B, VCCI, CE102, CS101, CS114, CS115, CS116, RE102, RE103, CE101		
RELIAB	**Standards**	MIL-HDBK-216, MIL-STD-810G, MIL-STD-1275E Compliant		
	MTBF	65,000 hours of operation at 40°C		

* Contact HSL for further information regarding TEMPEST capabilities. ** Coming Soon.

CERTIFIED **EAL 4+**

	MODEL	TC82PHG-3T	TC162PHG-3T
MAIN FEATURES	**Sources**	8 x HDMI	16 x HDMI
	Displays	2 x DP/HDMI	2 x DP/HDMI
	Max Resolution	Supporting UHD 4K resolutions up to 3840x2160	
PHYS	**Power Reqs.**	35W Max, 100 to 240V AC, Internal	35W Max, 100 to 240V AC, 2 x Internal (Redundant)
	Dimensions	442.5 x 299.7 x 43.6 mm	442.5 x 299.7 x 77 mm
	Weight	3.73 kg	7.00 kg

COMBINER HIGHLIGHTS

- **NIAP Common Criteria PP4.0 compliant (secure models only)**

  HSL's Combiner switches qualify for the latest NIAP Common Criteria Protection Profile version 4.0 (PP4.0) certification for Peripheral Sharing Device (PSD) devices.

- **View and control multiple computers simultaneously**

  With a single Combiner, view and control up to 16 computers at the same time.

- **Smoothly switch between computers (Virtual Display Technology)**

  Automatically switch control from one computer to another by dragging the mouse cursor over the computer's display border. The peripherals then switch to the next computer – without the need to press any buttons.

- **View applications in ultra-high definition (UHD) 4K video quality**

  Never compromise on video quality. Run graphic-intensive, ultra-high definition applications on all single and dual monitor Combiner models.

- **Native touch-screen support**

  Interact with all the computers connected to the Combiner, using touch-screen gestures. No need to install drivers or software.

- **Flexible screen layout**

  Resize source scaling and aspect ratio, to create tile, scale, and custom display layouts. Supports screen-duplication and extended screen-view modes.

- **Dual DisplayPort and HDMI connector**

  Connect either DisplayPort or HDMI sources into the same port, with the new dual-source video connector. Eliminates the need for adapters and converters.

  Enhance the user's experience by eliminating multiple peripheral sets.

- **State-of-the-art conversion scaler**

  Rapidly convert any input and output resolution (up to 4K) to optimal display quality, on a 4K screen, using the built-in scaler.

- **Extremely low latency viewing**

  View the input channel with extra low latency – below 10ms – using the direct mode feature.

- **Freeze channel layer**

  For a more dynamic and flexible presentation, it is possible to freeze a channel layer and switch the mouse through an active channel or channels.

- **Copy & Paste (N/A in Secure)**

  Transfer text and files between all the computers connected to the Combiner, through the Combiner (no network connection is needed between the computers). Use standard copy-and-paste keyboard key combinations (Ctrl+c/Ctrl+v) or mouse-context menu commands.

SC42PHU-4

HighSecLabs

HSL COMBINER
PRODUCT FAMILY MODELS

MODEL	SC42PHU-4/ SC44PHU60-4	SC82PH-4/ SC162PH-4	SC42PHU-4TR/ SC82PHU-4TR/ SC162PHU-4TR	SC42PHU-N/ SC44PHU60-N/ SC82PHU-N/	TC82PHG-3T/ TC162PHG-3T
MAIN FEATURES					
Desc.	Secure 4-Ports KVM Combiner Switch	Secure 8/16-Ports KVM Combiner Switch	Secure 4/8/16-Ports Rugged KVM Combiner Switch	Commercial 4/8-Ports KVM Combiner Switch	Secure 8/16-Ports KVM Combiner Switch
Sources	4 DP/HDMI	8/16 DP/HDMI	4/8/16 HDMI	4/8 DP/HDMI	8/16 HDMI
Displays	2 x HDMI/ 4 x DP/HDMI	2 x DP/HDMI	2 x HDMI	2 x HDMI/ 4 x DP/HDMI/ 2 x DP/HDMI/	2 x DP/HDMI
DPP Support	Yes	No	Yes	USB 3.0/ USB 2.0	No

HSL COMBINERS ARE TAA AND BAA COMPLIANT AND ARE BUILT IN HSL's FACILITY IN HUNTSVILLE, AL

TC162PHG-3T

COMING SOON
4K 60HZ VIDEO QUALITY

SC44PHU60-N

www.highseclabs.com