

# iPGARD™

Innovate | Protect | Guard



## Secure 4-port, Single-head DVI-I KVM switch with 4K Ultra-HD support.



### SDVN-4S

#### KEY FEATURES

- Supports Windows, Mac and Linux OS
- Single-head DVI-I video interface
- Native DVI-I resolutions support up to 2560x1600 @ 60Hz
- Supports balanced speakers output and switching
- Advanced configurable CAC port
- Front panel tactile buttons with LED indicator
- External power supply - Level VI efficiency

#### SECURITY FEATURES

- Non-reprogrammable ROM
- Active Anti-tamper switches
- Long-life internal Anti-tampering battery
- External tamper-evident seals
- Keyboard, Mouse and Video emulation
- Absolute isolation - No data leakage between ports
- Certified by NIAP, the latest Common Criteria (Protection Profile for Peripheral Sharing Switch Version 3.0)

#### APPLICATIONS

- Government Operations
- Defense Applications
- Secure Control Rooms
- Corporate Communications
- Server Operations
- Educational Administrations
- Medical Facilities
- Banking Network
- Insurance Data Centers
- Transit Management
- Industrial Operation
- Intelligence Communications



Designed and Manufactured in the USA



## WHY SECURE KVM?

Traditional non-secure KVM switches offer centralized control of multiple computers, but offer no absolute isolation between them. This exposes systems to the possibility of malicious damage and disruption, and acquisition of sensitive data from one computer to another.

IPGard's Secure KVM Switch is designed for use in secure defense and intelligence applications where sensitive data must be protected. The Switch is NIAP PP 3.0 certified and equipped with the highest security features that meet today's Information Assurance safe control standards. The switch prevents data leakage between computers that can run at different security levels, and eliminate any potential cyber threat.



## KEYBOARD AND MOUSE EMULATION

The Secure KVM emulates (simulates) the presence of a keyboard and mouse for every attached computer through a USB cable. Both selected and non-selected computers maintain a constant connection with the unit's keyboardmouse emulation controllers, allowing for ultra-fast switching and restricting discovery of newly connected peripherals during switching operations. Emulation of keyboard and mouse also prevents direct connection between the peripherals and the connected computers, shielding systems from potential vulnerabilities



## ULTRA-SECURE KVM SWITCHING

The SDVN-4S allows users to control KVM (Keyboard, Video and Mouse) operation of up to two computers with a single-head HDMI monitor. It features mechanical, electrical and optical signal isolation to prevent hacking and data leakage in environments where security is paramount.

With the SDVN-4S, all data relays are controlled by inverted signals, shielding connections from outside intrusion by forcing them each to work one at a time. Each port uses its own isolated data channel and each unit features nonre-programmable ROM to better protect the switch's functions. Better yet, the SDVN-4S offers the highest security when accessing classified and public networks over the internet through these isolated connections. By isolating connections between networks, the SDVN-4S ensures no data is leaked between secure ports and the outside world.

The SDVN-4S has clearly marked front-panel buttons for controlling the device, so securely switching between sources is always simple. For high-grade secure switching made easy, look no further than the SDVN-4S.



## CAC SUPPORT

The Secure KVM emulates (simulates) the presence of a keyboard and mouse for every attached computer through a USB cable. Both selected and non-selected computers maintain a constant connection with the unit's keyboardmouse emulation controllers, allowing for ultra-fast switching and restricting discovery of newly connected peripherals during switching operations. Emulation of keyboard and mouse also prevents direct connection between the peripherals and the connected computers, shielding systems from potential vulnerabilities



## SECURE EDID LEARN AND VIDEO EMULATION

The SDVN-4S simulates a generic EDID as default, allowing it to operate most of the connected monitors. Both selected and non-selected computers maintain a constant connection with the unit's video emulation controllers, allowing for ultra-fast switching and restricting discovery of newly connected monitors during switching operations. Upon activating the KVM, the unit will quickly and automatically learn new EDID for specific monitors. The unit then prevents unwanted and unsecure data from getting transmitted through DDC lines by means of secure EDID learning and emulation.

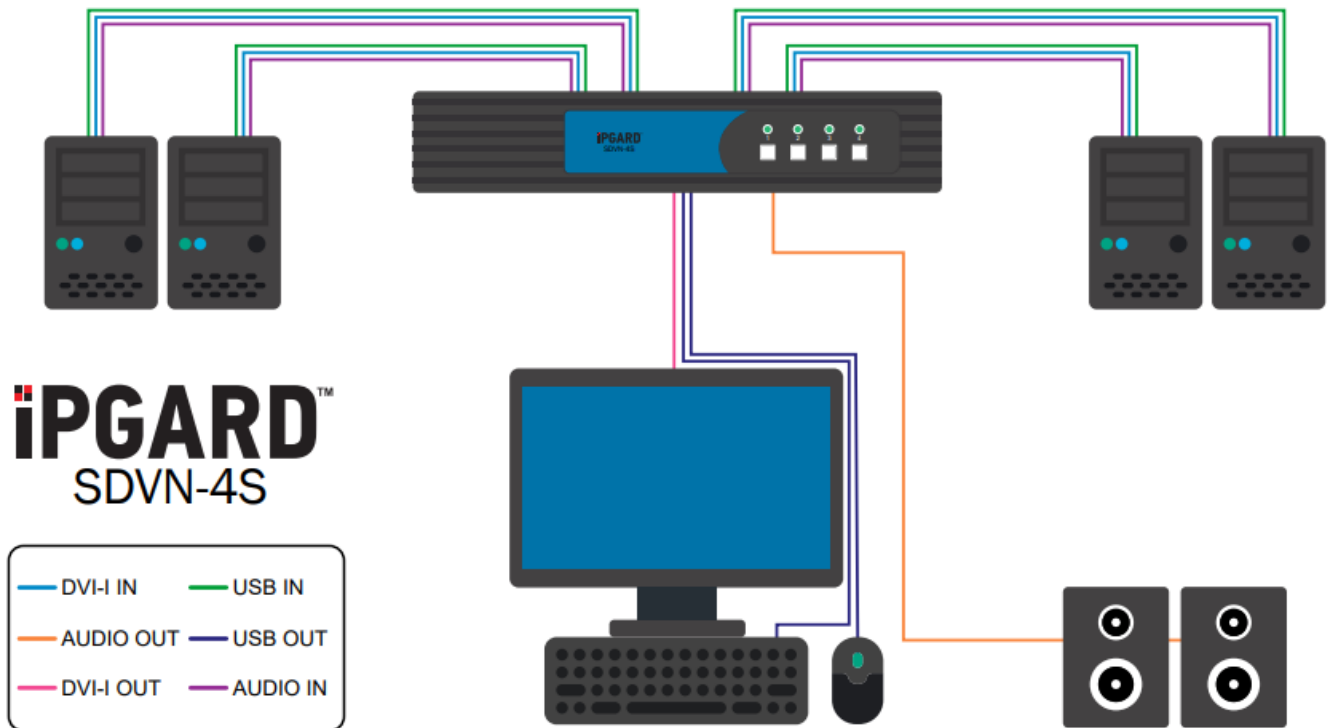


SDVN-4S Front



SDVN-4S Back

## INSTALLATION DIAGRAM



# SPECIFICATIONS

VIDEO	
Format	DVI-I Dual Link, DVI 1.0, DVI-D, XvGA
Input Interface	(4) DVI-I 29-pin
Max Pixel Clock	248 MHz
Output Interface	(1) DVI-I 29-pin
Resolution	Up to 4K (3840x2160 @30Hz)
DDC	5 volts p-p (TTL)
Input Equalization	Automatic
Input Cable Length	Up to 20 ft.
Output Cable Length	Up to 20 ft.
Data Rate	1.65 Gbps
USB	
Input Interface	(4) USB Type B
Output Interface	(2) USB 1.1 Type A for KM Devices
Emulation	USB 1.1 and USB 2.0 Compatible

AUDIO	
Audio Input	(4) 3.5mm stereo audio
Audio Output	(1) 3.5mm stereo audio
OTHER	
Power	External 100-240 VAC/ 12VDC2A @ 24W
Dimensions	12.57" W x 1.76" H x 6.69" D
Weight	4.2 lbs
Approvals	NIAP PP 3.0, UL, CE, ROHS Compliant
Operating Temp.	+32 to +104°F (0 to +40°C)
Storage Temp.	-4 to 140°F (-20 to +60°C)
Humidity	Up to 80% (no condensation)

PRODUCT ORDERING INFORMATION	
Model Number	Description
<b>SDVN-4S-S</b>	4-Port SH Secure DVI-I KVM w/ audio, PP 3.0 Includes: [1872-IPG-1011; PS12V2A]

# IPGARD™

Innovate | Protect | Guard

**[www.ipgard.com](http://www.ipgard.com)**

**Tel: (800) AVI-2131**

**(702) 800-0005**

**2455 W Cheyenne Ave, Suite 112**

**North Las Vegas, NV 89032**



**Designed and Manufactured in the USA**

**NOTICE:**

The information contained in this document is subject to change without notice. Smart-AVI makes no warranty of any kind with regard to this material, including but not limited to, implied warranties of merchantability and fitness for any particular purpose. Smart-AVI will not be liable for errors contained herein or for incidental or consequential damages in connection with the furnishing, performance or use of this material. No part of this document may be photocopied, reproduced or translated into another language without prior written consent from Smart-AVI.