

## **Adder AVSD1004-US 4-Port Secure USB DVI-I EAL2/KVM Switch**

*This listing is for AVSD1004-US (4 ports) Switcher only. Use description below as a general reference.*

The ADDERView Secure KVM Switch allows a keyboard, monitor and mouse to be shared between high and low security systems, sometimes known as red and black networks, and is designed carefully to prevent information flowing between computers or to the outside world via emissions snooping.

The ADDERView Secure design prevents sensitive data from leaking between ports, sensitive data leaking to the outside world and sensitive data from being stored in the device to actively combat a range of potential leakage "threats".

### **EAL4+ Certification**

Independently tested against common criteria, the AVSD achieves Evaluation Assurance Level 4+. CERTIFICATION REPORT No. CRP259

### **EAL2+ Certification**

EAL2+ Common Criteria Evaluation Assurance Level 2 (augmented by ALC\_FLR.2) COMMON CRITERIA (ISO 15408) ASSURANCE LEVEL and Peripheral Sharing Switch (PSS) For Human Interface Devices Protection Profile, IAD, Version 2.1, 7 September 2010. CERTIFICATION REPORT No. CRP268.

### **Uni-directional data paths for Keyboard and Mouse**

Unique one-way data paths ensure that data isolation does not rely on trusting microprocessor software, but is instead assured by hardware and prevents a hidden software weaknesses that could potentially cause data leakage. A uni-directional structure also protects against timing analysis or forced malfunction attacks and prevents computers influencing the operation of any common circuitry.

### **Minimal emissions profile**

The ADDERView Secure is heavily shielded with double shielding in critical areas to minimise the risk of eavesdropping equipment being able to pick up signals from the equipment.

### **No shared RAM between ports**

The keyboard and mouse processor is powered down and reset at each switchover to thwart shared RAM leakages. Separate memories hold the num, caps and scroll states and are only accessible when the relevant channel is selected. All data buffers are cleared once they have been used.

### **One time programmable microprocessors**

Microprocessors are one time programmable and don't contain reprogrammable flash memory. This protects against sensitive data being stored within the device and protects the software against being corrupted.

### **60dB crosstalk isolation**

High crosstalk isolation ensures that less than 1/1000th of any signal from one computer is presented to the input of another computer due to electrical crosstalk.

### **Restricted USB function**

The USB ports will only support keyboards and mice and other devices, such as USB storage drives, are actively prohibited.

### **No microphone connections**

To prevent small levels of crosstalk noise from being "recorded", microphone connections are banned from the design.

### **Independent power supplies block power line signalling**

The circuitry for each port is independently powered from the USB lead. Power line signaling is therefore blocked because different port circuits don't share the same power feed.

### **ADDERView Secure checks its own operation**

The hardware and software must agree before data flow is enabled. The switch constantly checks its own operation and will stop operating and flash its error light if an unanticipated event occurs.

### **Maximum compatibility**

For maximum compatibility and security USB keyboard/mouse and dual link DVI-I monitor interfaces are used and makes the AdderView Secure truly platform independent.

### **Superb video performance**

Dual link DVI interface operates at full DVI bandwidth to ensure higher end applications that require exact video quality, sometimes at very high video resolutions, are not compromised. DVI interfaces have the added security advantage that randomizing the low order video bit can make snooping much harder.

### **Additional Features**

Digital or analogue video

Simple channel selection

Tamper proof design

Keyboard and mouse hotkey switching is banned from the design