Ultimate Security - Hardwired Black and Red isolated KVM

ADDERView AVS Range

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PRODUCT IN BRIEF

The AdderView Secure range of products are highly robust KVM switches for critical applications. When information absolutely must not be leaked between systems or networks, the AdderView Secure units combine the necessary isolation with a desirable ease of use.

AdderView Secure units combine a number of overlapping strategies that are designed to defeat potential points of infiltration or protect against user error.
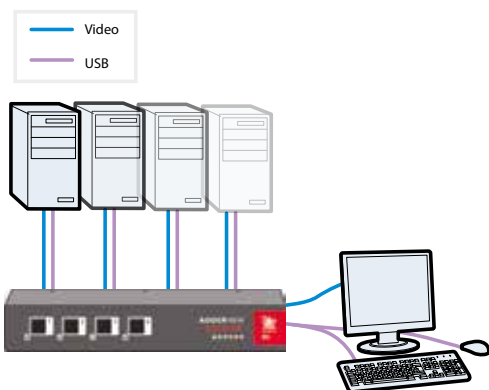
— Video
— USB

The switching section is hard wired to allow only one channel to be selected at any time.

Common keyboard, mouse and video monitor are able to access multiple high security computers/networks, safe in the knowledge that data will not be transferred from one to another, either by user error or subversive attack.

FEATURES

TEMPEST qualified and EAL4+ certified
Tempest certified design (USA NSTISSAM Level I and NATO SDIP-27 Level A), EAL4+ Common Criteria Evaluation Assurance Level 4 (augmented by ALC_FLR.2 and ATE_DPT.2).

Physical port identification
Channel switching is controlled only from the front panel buttons. No keyboard or mouse switching commands are permitted.

Hardwired port isolation
Data Diodes, implemented within hard-wired electronic circuitry, rather than software, are liberally employed to ensure that critical data paths can flow only in one direction. These data diodes ensure that a compromised peripheral, a keyboard for instance, cannot read information back from a connected system in order to transfer such details to another system. Whenever a channel is changed, the connected keyboard and mouse are always powered down and re-initialized to provide yet another level of protection against hidden peripheral malware.

No critical software reliance
In general, the role of software within the unit has been reduced to an absolute minimum to avoid the possibility of subversive reprogramming. Additionally, all flash memory has been banished from all security critical areas of the design, to be replaced by one-time programmable storage which cannot be altered.

Minimal emission design
The outer casing contains extensive shielding to considerably reduce electromagnetic emissions. Additionally, the casing has been designed with as few apertures as possible to reduce the possibility of external probing and several primary chassis screws are concealed by tamper-evident seals to indicate any unauthorized internal access. Shielding extends also to the internal circuitry with strong levels of electrical crosstalk isolation between ports to protect against signals from one computer becoming detectable on another.

Physical port identification
AdderView Secure units are available in two port and four port sizes. Each size can be ordered in standard and enhanced versions. The enhanced versions allow you to attach a smart card reader that can be securely shared between the connected systems. The enhanced versions also contain anti-subversion and authentication features that guard against intrusion and allow you to prove that the unit is genuine, respectively.

These are just a few of the many strategies and innovations that have been combined to reinforce the separation between differing systems. Numerous other defences lie in wait to defeat potential threats.

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Feature Matrix

	Standard 2-port AVSV1002	Standard 4-port AVSV1004	Enhanced 2-port AVSC1102	Enhanced 4-port AVSC1104
Uni-directional keyboard / mouse data paths	YES	YES	YES	YES
High port-to-port cross-talk isolation	YES	YES	YES	YES
Heavy shielding for low emissions	YES	YES	YES	YES
Single key per port for selection	YES	YES	YES	YES
USB or PS/2 computer connections	YES	YES	YES	YES
Tamper protection	YES	YES	YES	YES
Secure DDC EDID strategy	YES	YES	YES	YES
Smartcard reader support			YES	YES
Combined keyboard/ smartcard reader support			YES	YES
Advanced tamper protection / reporting			YES	YES
Authentication function			YES	YES

TECHNICAL SPECIFICATIONS

Hardware compatibility
Compatible with all known platforms featuring VGA video and USB HID or PS/2 connectivity

OS compatibility
All known software and operating systems including Windows (all), DOS, Linux, Unix, BSD, Sun OS, Solaris, Mac OS, NetWare etc.

Computer connections at switch
2 x USB HID (Keyboard/Mouse), HD-15 VGA, 2 or 4 x system link connection, smart card USB

Physical design
Compact case, robust metal construction, extensive shielding

Power connection
100-240 VAC 47/63Hz

Operating temperature
0°C to 40°C / 32°F to 104°F

Approvals
EAL4+, CE, FCC
Tempest qualified design

ORDERING INFORMATION

4 Port Enhanced: AVSC1104-XX
4 Port Standard: AVSV1004-XX
2 Port Enhanced: AVSC1102-XX
2 Port Standard: AVSV1002-XX

XX	= Mains Lead Country Code:
UK	= United Kingdom
EURO	= Europe
AUS	= Australia

Export restrictions apply to specific countries. Please enquire with Adder if you are considering exporting these products.

CABLES

The special cables available for connections to each system are carefully constructed with braid and foil to provide excellent screening against signal emissions that could otherwise be eavesdropped. A similarly constructed cable is also available for the monitor connection (VSCD9).

The special cables already have ferrite cores fitted to assist with signal suppression. For USB peripheral connections, we strongly recommend that (if not already fitted) you attach ferrite cores to those cables to further assist with emission suppression.

Shielded link cable (VGA, PS/2 keyboard, PS/2 mouse)
Part code: VSCD5 (length 1.8m/6ft)

Shielded link cable (VGA, USB keyboard/mouse, USB card reader)
Part code: VSCD6 (length 1.8m/6ft)

Shielded link cable (VGA, USB keyboard/mouse)
Part code: VSCD7 (length 1.8m/6ft)

Shielded link cable (VGA only)
Part code: VSCD9 (length 1.8m/6ft)

RELATED PRODUCTS

Adder offer a vast range of products to suit your needs. Other products you may be interested in include:

ADDERView PRO
AV4PRO-DVI

ADDERView PRO
AV8PRO-DVI

ADDER CCS4USB
CCS4USB

ADDERView Secure
AVSD1004: AVSD1002

ADDER