
CS1148H

8-Port USB HDMI Dual Display Secure KVM Switch (PSS PP v3.0 Compliant)



ATEN PSS PP v3.0 Secure KVM Switch (CS1148H) is specifically designed to meet the stringent security requirement of secure defense and intelligence installations. ATEN PSS PP v3.0 Secure KVM Switch (CS1148H) is compliant with PSS PP v3.0 (Protection Profile for Peripheral Sharing Switch, Version 3.0) standard certified by the National Information Assurance Partnership (NIAP).

ATEN PSS PP v3.0 Secure KVM Switch (CS1148H) provides isolation between computer sources and peripherals while sharing a single keyboard, mouse, monitor, speaker set, and Common Access Card (CAC) reader between connected computers of various security classifications. Compliance with PSS PP v3.0 ensures peripheral sharing capabilities provide maximum user data security when switching port focus, preventing unauthorized data flows or leakage between connected sources. Key protections include isolation and unidirectional data flow, restricted peripheral connectivity and filtering, user data protection, configurable device filtering and management, and always-on tamper-proof design, keeping sensitive assets isolated and providing advanced security and a user friendly design for instantly secure deployment.

With multi-layered security, ATEN PSS PP v3.0 Secure KVM Switch (CS1148H) ensures high-level desktop security and data safekeeping for applications such as government agencies, finance, and other organizations that often handle sensitive or confidential data on separate networks.



Features

- **NIAP Common Criteria Compliant**

- Compliant with PSS PP v3.0 (Protection Profile for Peripheral Sharing Switch, Version 3.0) security requirements

- **Multi-Layered Security**

- Restricted USB Connectivity – non-authorized HID (Human Interface Devices) or non-predefined CAC devices will be rejected / ignored
- Always-on Chassis Intrusion Detection – renders the ATEN PSS PP v3.0 Secure KVM Switches inoperable when physical tampering is detected
- Tamper-Evident Seals– provides visual indication of any attempt to access the ATEN PSS PP v3.0 Secure KVM Switches' internal components
- Non-Reprogrammable Firmware – prevents reprogramming the ATEN PSS PP v3.0 Secure KVM Switches
- Port selection via pushbuttons only to enhance security
- LED indicators for peripheral filtering and KVM security status
- Rugged metal enclosure

- **Data Channel Isolation and Unidirectional Data Flow**

- Data Channel Isolation – prevents data leakage between connected computers via isolated channel per port
- Unidirectional Data Flow – ensures unidirectional data flow between the console devices and the selected computer
- ATEN PSS PP v3.0 Secure KVM Switches control and isolate data flow between the console devices and connected computers
- Supports analog audio (speaker only)*

- **User Data Protection**

- User Data Protection – Keyboard/Mouse data buffer is automatically purged when switching KVM port focus

- **Security Management**

- KVM Log Data – provides administrative functions for authorized administrator to audit KVM log data
- Configurable Device Filtering – USB CAC Port can be configured to allow/reject whitelisted / blacklisted devices via Admin logon function or Windows-based application
- Supports enable / disable CAC function by port

- **Superior Video Quality**

- Superior video quality – up to 4K (3840 x 2160 @ 30 Hz)**
- Video DynaSync™ – Exclusive ATEN technology eliminates boot-up display problems and optimizes resolutions when switching between ports

* Only analog speaker data input is supported. The ATEN PSS PP v3.0 Secure KVM Switches does not convert digital audio to analog audio.

** HDMI Secure KVM Switch series supports console video output resolutions up to 4K @ 30 Hz.

Specifications

Computer Connections	8
Port Selection	Pushbutton
Connectors	

Console Ports	2 x USB Type-A Female (White) 1 x 6-pin Mini-DIN Female (Purple) 1 x 6-pin Mini-DIN Female (Green) 2 x HDMI Female (Black) 1 x Mini Stereo Jack Female (Green; front panel)
KVM Ports	16 x USB Type-B Female (White) 16 x HDMI Female (Black) 8 x Mini Stereo Jack Female (Green)
Power	1 x 3-prong AC Socket
USB CAC Port	1 x USB Type-A Female (White; front panel)
Switches	
Port Selection	8 x Pushbuttons
Reset	1 x Semi-recessed Pushbutton
Power	1 x Rocker
LEDs	
Power	1 (Blue)
Online / Selected (KVM Port)	8 (Orange)
Online / Selected (CAC Port)	8 (Green)
Video	2 (Green)
Key Lock	3 (Green)
Emulation	
Keyboard / Mouse	USB
Video	Max. 3840 x 2160 @ 30 Hz (UHD); 1920 x 1080 (FHD)
Maximum Input Power Rating	100–240V~; 50-60 Hz; 1A
Power Consumption	AC110V:6.1W:48BTU/h AC220V:5.9W:47BTU/h Note: ● The measurement in Watts indicates the typical power consumption of the device with no external loading. ● The measurement in BTU/h indicates the power consumption of the device when it is fully loaded.
Environmental	
Operating Temperature	0-50°C
Storage Temperature	-20-60°C
Humidity	0 - 80% RH, Non-condensing
Physical Properties	
Housing	Metal

Weight	3.21 kg (7.07 lb)
Dimensions (L x W x H)	43.24 x 20.49 x 6.55 cm (17.02 x 8.07 x 2.58 in.)
Note	For some of rack mount products, please note that the standard physical dimensions of WxDxH are expressed using a LxWxH format.

Diagram

