

# THE NEXT GENERATION IN MODULAR VIDEO WALL TECHNOLOGY



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Mission critical environments, security monitoring centers and tactical operation centers require high performance video display and control solutions.

Information needs to be displayed quickly, switched seamlessly and controlled at the touch of a button.







As technology advances rapidly creating a greater demand in seamless & easy to control systems, the AVXWALL + can adapt to any environment & surpass your expectations.

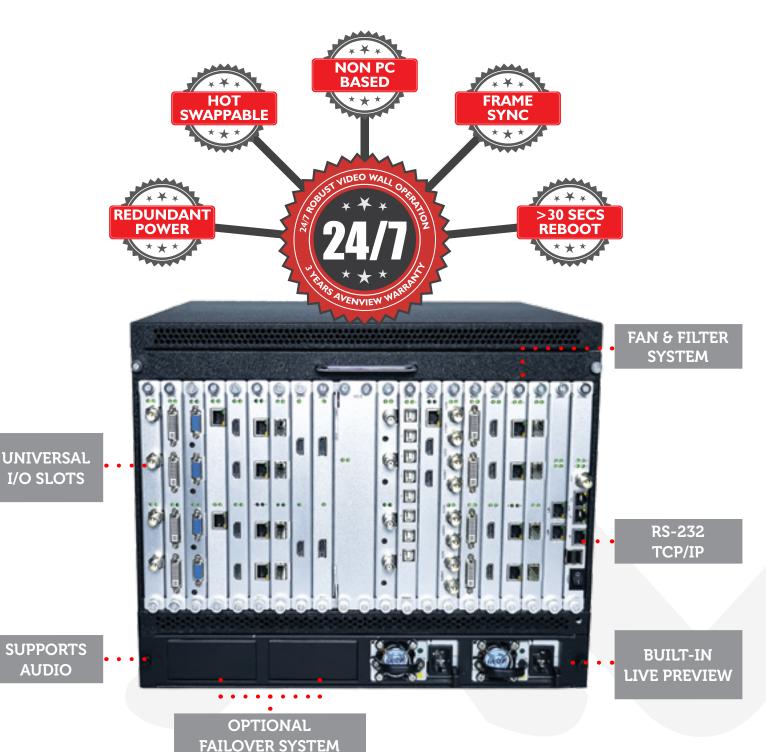
Ednan Chaudhry,
 President of Avenview

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## **DETAILED LOOK**

#### **Robust Build**

Designed to be robust and reliable, the AVXWALL + guarantees uncompromised performance even in the harshest environments. The unit's hot swappable cards and redundant power supply provide uninterrupted, continuous operation at all times. The system takes less than 30 seconds to reboot in case of a power outage or following system maintenance.







#### **Hardware Platform**

- 24/7 stable operation
- Secure infrastructure
- No driver updates required

#### **Modular Design**

- Expandable system (up to 28U)
- Hot swappable I/O cards
- Compatible with multiple video formats

#### **FPGA Chipset**

- Powerful processing
- Seamless switching
- Frame synchronization

#### **Manageable Output**

- 16 images per screen
- Overlay of up to 8 layers
- Background image

#### **Account Management**

- Multi-user access
- Secure account creation
- Administration privileges

#### **Advanced Functionality**

- KVM control
- On screen mouse & touch control
- RTSP confidence monitoring



AUDIO

## CH3-16U / CH4-16U





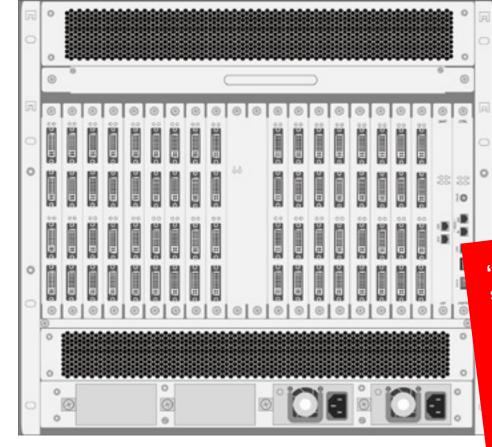




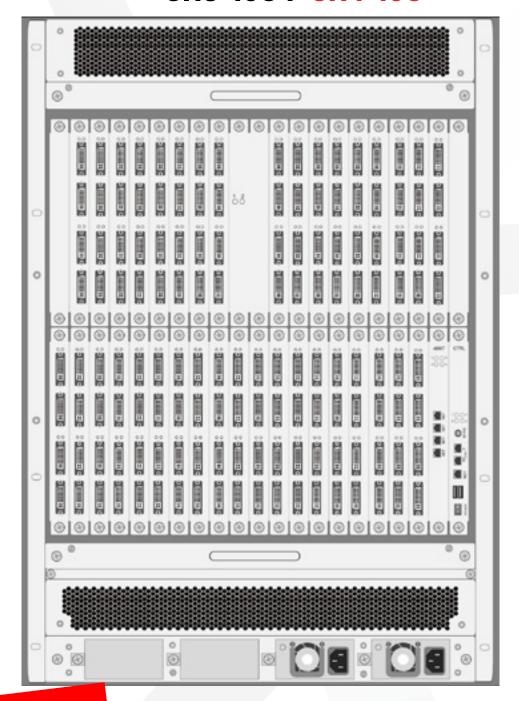
#### **CH4-4U**



## CH3-10U / CH4-10U



"CH4" chassis's slots are universal allowing both I/O cards to be inserted interchangebaly. Instantly upgrade or downsize the # of inputs/outputs to your requirements.



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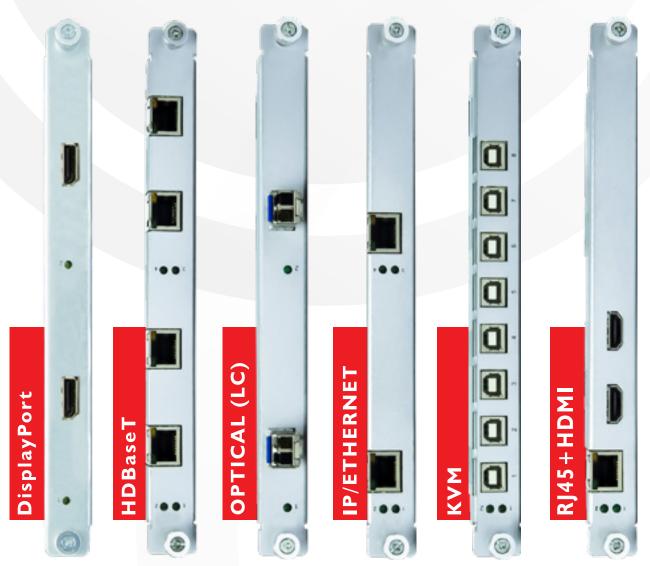
Chassis Model	# of I/O card slots	Max. # of input sources (HD/4K)	Max. # of output connection (HD/4K)	Size (WxHxD)	Universal Slots
CH4-2U	4	12/6	12/6	17.32" x 3.5" x 15"	Yes
CH4-4U	8	28 / 14	28 / 14	17.32" x 6.9" x 15"	Yes
CH3-10U	9 Input, 8 Output	36 / 18	32 / 16	17.32" x 17.4" x 15"	No
CH4-10U	17	64 / 32	64 / 32	17.32" x 17.4" x 15"	Yes
CH3-16U	18 Input, 18 Output	72 / 36	72 / 36	17.32" x 27.9" x 15"	No
CH4-16U	34	132 / 66	132 / 66	17.32" x 48.9" x 15"	Yes
CH3-28U	38 Input, 38 Output	152 / 76	152 / 76	17.32" x 48.9" x 15"	No

## **INPUT/OUTPUT CARDS**





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CARDS	720x480i@60 (NTSC) 720x576i@50 (PAL)	1920×1080@60	1920x1200@60	4096x2160@30 2560x1600@60	PORTS PER CARD
CVBS	✓				4
VGA	✓	✓	✓		4
SDI	✓	✓			4
DVI-I (Single Link)	✓	✓	✓		4
HDMI 1.3	✓	✓	✓		4
DVI-D (Dual Link)	✓	✓	✓	✓	2
4K HDMI 1.4	✓	✓	✓	✓	2
DisplayPort	✓	✓	✓	✓	2
HDBaseT (RJ45)	✓	✓	✓		4
Optical Fibre (LC)	✓	✓	✓		2
IP/Ethernet	✓	✓			2
KVM Card					8
Control Card	✓	✓			I RJ45 + 2 HDMI



CARDS	TRANSMITTER/RECEIVER REQUIRED	NETWORK SWITCH REQUIRED	AUDIO	DISTANCE COVERED (in ft)
CVBS			3.5 mm Audio Jack	AS PER SPECS
VGA			3.5 mm Audio Jack	AS PER SPECS
SDI			Audio Embedded	AS PER SPECS
DVI (Single Link)			3.5 mm Audio Jack	50 ft
HDMI 1.3			Audio Embedded	50 ft
DVI (Dual Link)			3.5 mm Audio Jack	30 ft
4K HDMI 1.4			Audio Embedded	30 ft
DisplayPort			Audio Embedded	30 ft
HDBaseT (RJ45)	✓		Audio Embedded	330 ft
Optical Fibre (LC)	✓		Audio Embedded	130,000 ft
IP/Ethernet		✓	Audio Embedded	330 ft
KVM Card				30 ft
Control Card		✓	Audio Embedded	330 ft

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## **3 WAYS TO CONTROL**

#### **Computer Software**

The AVX Series is engineered to be user friendly, with three methods of control: RS-232, TCP/IP LAN and WiFi. Compatible to 3rd party software controls, the installer can customize their solution using our readily available command resources.



Third Party
Control System









#### **Network Ready**

Connecting the video wall processor via a Local Area Network allows the user to effortlessly manage the functions and features of the unit over any secure network. With the option of using the AVXWALL + PC Software or 3rd party control system, the video wall canvas can be managed by multiple users over IP.

Another advantage is the ability to decode IP cameras connected on the same network using the optional IP card. The user can also encode an entire video wall canvas and decode the stream on their PC/Laptop via RTSP with the confidence monitor card.

#### iPad Application

As most companies today are equipped with mobile tablet devices, to give users extended flexibility Avenview has developed a customized AVXWALL+ app. This method of control allows the user to simply drag & drop, resize and recall pre-sets with simple touch gestures within the app. With live preview options of the video wall canvas and the active sources the user can manage the canvas without being in the same location as the displays. Available on the iTunes App Store.

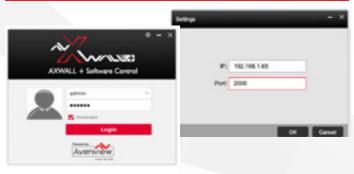


## **PC SOFTWARE**

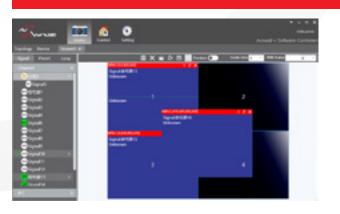


The multiple features and functions of the AVXWALL + are all controlled from the supplied PC Software or via an iPad app. Both are easy to use, intuitive and effective.

#### Account Management

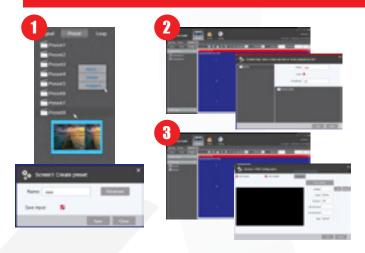


Our AVXWALL + Software has the ability to create multiple user accounts with three types of privileges with secure password protection. We also introduced simultaneous access for video wall collaboration.



With both the iPad app and the control software, users have access to multiple layout features and functions: drag & drop sources to the screen, create image overlays, and PIP layouts. Movements are seamless and there is no delay.

#### Preset, Slideshow & OSD Creation



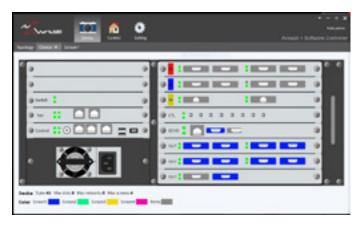
With our upgraded hardware design we enhanced the ability to save and recall up to 1000 pre-sets in the AVXWALL + PC software.

The users can also group the presets made and configure it to be played in a slideshow format with varying time intervals.

Another added feature is the OSD (On Screen Display) Scroll bar the user can assign test information to be displayed across the video wall in a static or scroll effect motion, along with horizontal and vertical positioning. Not limited to font and color choices.

#### **Troubleshoot**

**Control GUI** 



We built both the software and hardware with the user and installer in mind. Redundant parts allow the user to trouble shoot at ease and view the build of the chassis directly from the PC software.

LED indicators show which I/O is active and displays for quick assessment and reporting.

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## **CONFIDENCE MONITOR**



Newly added confidence monitor card provides a secure output of the entire video wall canvas to another seperate screen for the operator to conveniently view, monitor, stream and record for management and security purposes. Multiple cards can also be used to create a duplicate of all four video walls in a second location. Equipped with two (2) HDMI ports and an RJ45 for RTSP encoding.

## **MULTI KVM CONTROL**



Control up to eight (8) USB or HID compatible devices with the Avenview AVXWALL + unique KVM card. Secure and easy access over multiple workstations with a single keyboard and mouse. If your solution requires more than 8 USB devices, simply add more cards to the chassis. This solution is highly requested within command centers and control room operations.

## **IP CARD**





The AVXWALL + can receive and display multiple sources over the LAN network, including IP cameras connected on the same network using the optional IP Decode Input Card. An optional license sharing software is also available for casting and sharing any PC/Laptops or servers via the same IP network connection.

## **ON SCREEN CONTROL**



The AVXWALL + is designed with the user in mind. Take full control over the video wall canvas without a PC/Laptop or tablet using on screen mouse control (OSMC). Manage by simply connecting a mouse and keyboard directly to the AVXWALL + chassis or use touch enabled displays to have complete control of sources or window layout designs.

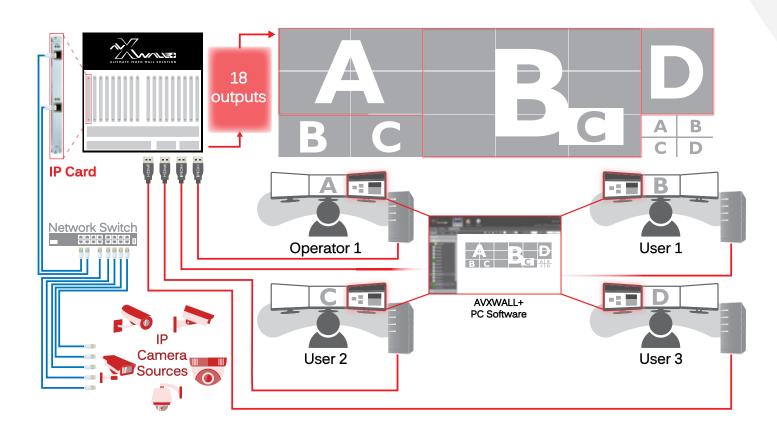
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## **APPLICATIONS**

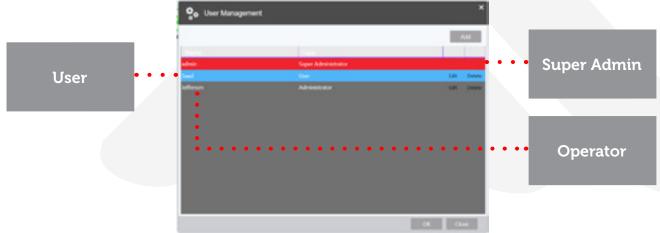
# Avenview

## Monitoring Center Scenario

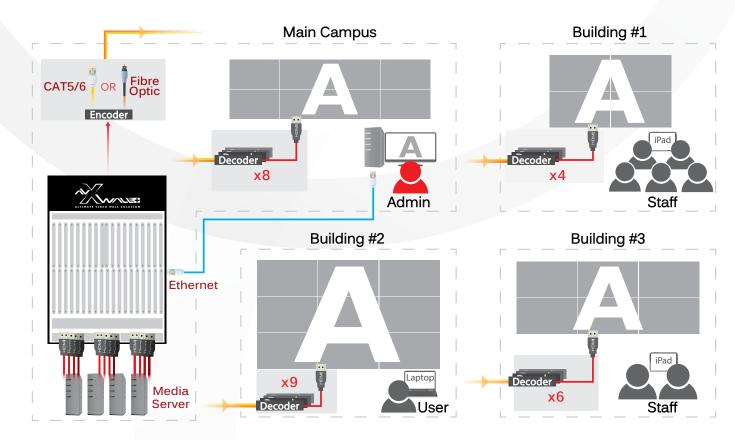


#### **Multi User Management**

In a monitoring center, multiple sources and camera feeds can be monitored and viewed simultaneously on a large video wall as well as on individual workstations. Multiple users, operators and an administrator can all be logged into the AVXWALL + PC software to select their display area, share information from their screens, or view other users' information. With Multiple User Account Control, Avenview provides a single software control to allow collaboration and sharing in a multi user environment.



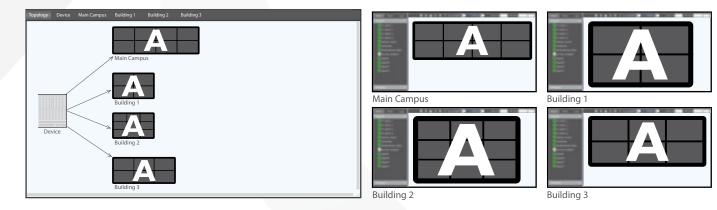
## Information Sharing Scenario



#### **Multiple Video Wall Control and Long Distance Extension**

On corporate or education campuses, sharing information to video walls in multiple offices or locations can be a vital part of a unified campus communication program.

A standard feature of the AVXWALL + is the ability to create and control 4 different video walls from one main unit. This can be avhieved with the HDBaseT and Fibre Optic Output cards, allowing long distance extension without the use of separate extenders, and having additional video walls to be in remote locations.



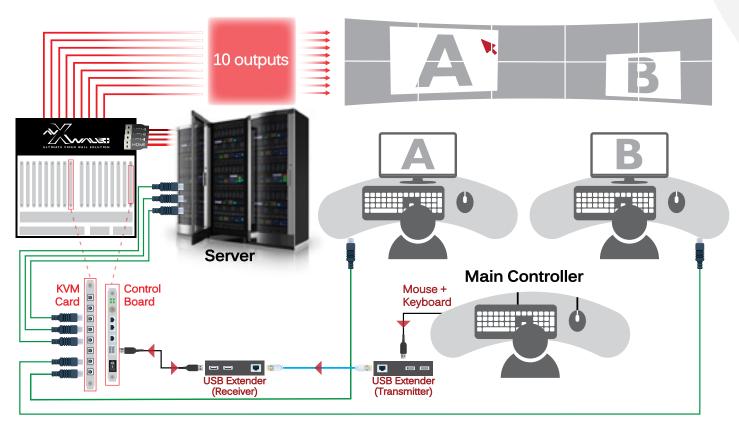
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## **APPLICATIONS**

# Avenview

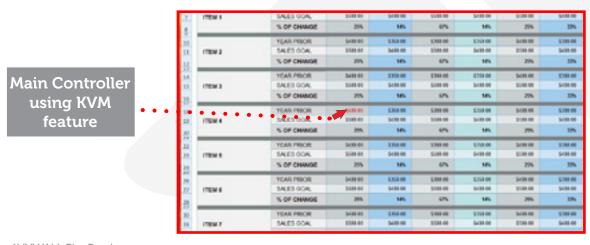
## **Command Control Centers Scenario**



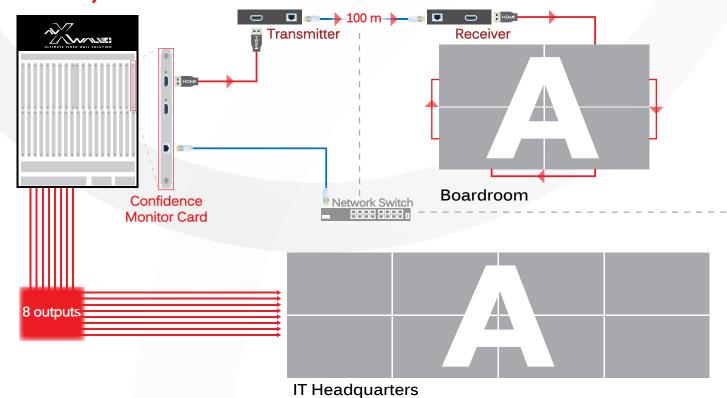
#### **KVM Feature**

Command and Control centers provide a vital and central control to organizations. Whether tactical, security, network operations, or combined operations, command centers are responsible for continually monitoring the environment and respond to events.

The Avenview KVM Control feature puts the power in the hands of a central operator. The central operator will have access and control, via a single keyboard and mouse, of each of the connected workstations on the server, giving them the complete control of the command center.



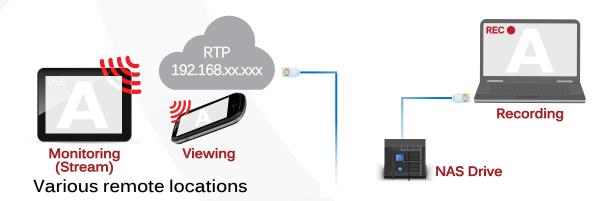
## **Quality Assurance Scenario**



#### **Confidence Monitor Card**

Across any application or market sector, the confidence monitor card provides a valuable role to enhance the use and functionality of any video wall installation. This card will allow the entire video wall display to be duplicated to a single HDMI or CAT output.

With two (2) HDMl and one (1) CAT output, the confidence monitor card can be used in a variety of useful ways: 1) View the entire video wall on a small local screen to ensure quality and for troubleshooting. 2) Create a duplicate video wall in a second location. 3) Stream, record or view the video wall across the network via RTSP stream.

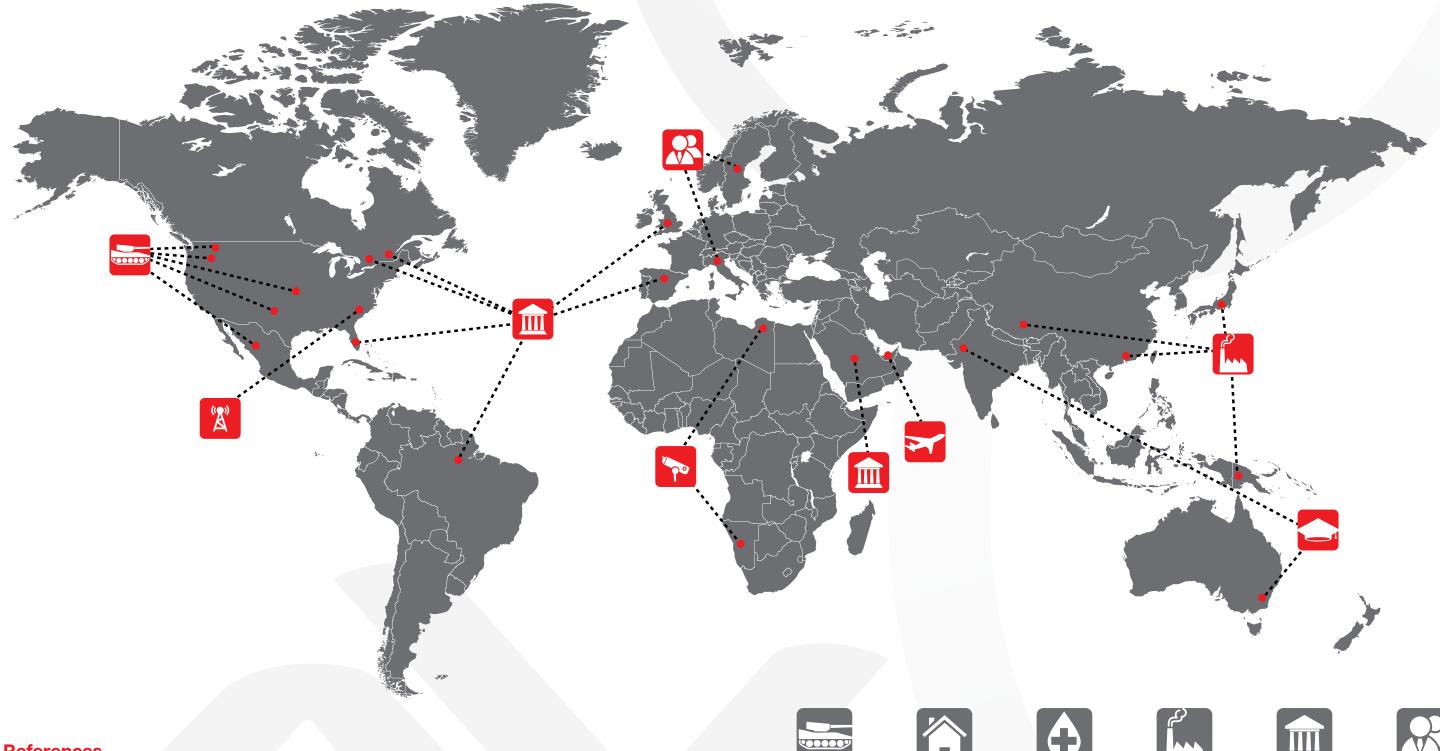


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AVXWALL Plus Brochure

## **APPLIED SYSTEMS**





#### **Project References**

- Newspaper Editorial Conference Room
- Waterworks Waste Management Center
- Military Command Center
- Aviation Control Tower
- Broadcast Studio

- Police Headquarters
- University Lecture Hall
- Government Offices
- Traffic Control Center
- Transportation Visual Center



Residential





Government





Entertainment











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