



Newport-Mesa
Unified School District

blueviolet
NETWORKS

**Your Local CMAS
Contractor**

REQUEST FOR INFORMATION

#104-21

INSTALL AND IMPLEMENTATION OF A DISTRICTWIDE INTEGRATED SECURITY SYSTEM



Newport-Mesa
Unified School District

Blue Violet Networks
17815 Newhope Street, Suite M
Fountain Valley, CA 92708

Prepared By:

Rob Clement
Director of Security Sales and Engineering
(949) 540-5542

RClement@blueviolet.net

April 4, 2021

Jonathan Geiszler
Director of Purchasing & Warehouse
2985 Bear St. Bldg. A
Costa Mesa, CA, 92626

RE: RFI #104-21 Install and Implementation of a District Wide Integrated Security System.

Dear Mr. Geiszler,

Any questions Newport Mesa Unified has regarding this proposal can be directed to Rob Clement, Director of Security Sales and Engineering, at 949-540-5442 or at rclement@blueviolet.net.

Our goal is to provide Newport Mesa Unified with the best products and services.

Blue Violet Networks (BVN) has been an industry leader for over 41 years. Since 1979, Blue Violet has implemented best of breed technology to produce extraordinary results for clients in multiple industries across North America.

We are continuously evolving, integrating new technology, and are what we call a 'modern interpretation' of a communications and enterprise security solutions provider.

Our local team designs, installs, and services electronic security solutions for both campuses and multi-building/multi-site customers. By developing a deep understanding of our client's unique business environment, applications for security technology, and utilizing a detailed playbook to capture desired outcomes, we have created a reputation of success in deploying large, complex, enterprise systems.

Our engagement with Irvine Valley College has totaled over \$6 million dollars and including over (250) new cameras, nearly (800) access control doors, and point to point wireless radios. For Irvine Unified School District, our team was selected for a technology refresh totaling over \$3 million dollars which included the implementation of more than (700) cameras and associated structured cabling and point to point wireless P2P and PTMP radios. BVN is the oldest Mitel Dealer in the United States and one of the first companies to install voicemail in the world. We continue to lead and deliver next-generation network platforms from Unified Communications to cutting edge security. We are an experienced Systems Integration company, providing and servicing large, enterprise Video Surveillance Systems, Access Control Systems, Data



Networks, and IT infrastructure. As Avigilon's largest CMAS integrators, we are experts in bringing Avigilon security solutions to Education clients and driving results using the latest AI-driven analytics. Our approach focuses around bringing service and technology together, acting as trusted consultants to our clients. Our solutions consultants help to navigate the confusion in the market caused by the accelerating pace of change in IT. We understand technology trends and guide customers through the decision-making process to make an impact, using systems to provide core functions and provide actionable business intelligence. We work side by side with your team to design, procure, implement, and support even the most complex IT solutions. Blue Violet Networks leverages open-source technologies that are both flexible and cost effective. These solutions are highly scalable, integrate with third party systems and are aligned with our customers long term physical security and IT initiatives. Avigilon Control Center is the leading end-to-end video surveillance system and provides distinctive video analytics. Blue Violet Networks is the leading Avigilon integrator on the West coast. We are uniquely qualified to design, implement, and service an Enterprise-class system for Newport Mesa Unified that will meet the specifications of this RFI and exceed your expectations in project execution.

Rob Clement

Rob Clement
Director of Security Sales and Engineering
Blue Violet Networks

Table Of Contents

Executive Summary	5
Motorola-Avigilon Solution Narrative	6
Detect	7
Video Security	8
Access Control Manager	9
Radio Connectivity with Orchestrate	10
Orchestrate	11
Analyze	11
Unusual Motion Detection	12
Focus of Attention	13
Appearance Search	13
Identity Search	14
Self-Learning Video Analytics	15
Elevated Temperature Detection	16
Communicate	16
Respond	17
Sample Network Topology for ACC	18
Sample Topology for ACM	18
Glossary	20
RFI Questionnaire	23
Additional RFI Response Requirements	33
Similar and Completed Solution Deployments in K-12 Schools with 20,000 ADA or higher From Blue Violet Networks	33
II. References	33
II.A Irvine Valley College – (2) Locations	33
II.B Irvine Unified School District – (48) Locations	34
II.C Oak Park Unified School District – (8) Locations	34
II.D Tustin Unified School District – (32) Locations	34

II.E Fullerton Unified School District – (28) Locations	34
II.F Mount San Jacinto College - (4) Locations	34
III. Experience	35
III.A Irvine Unified School District – Multi-Phase Video Surveillance Project	35
III.B Tustin Unified School District – District Video Surveillance and Analytics Project	35
III.C Irvine Valley College – Campus Wide Video Surveillance and Access Control Project	35
III.D Fullerton Unified School District – Multi-Phase District Video Surveillance Upgrade	35
III.E Westminster Police Department – Video Surveillance Upgrade Project	35
III.F Centralia Unified School District – Video Surveillance Upgrade Project	36
Budgetary Costs for Purchasing	36
Supplemental Data	39

Executive Summary

High-resolution cameras with edge-based intelligence, A.I.-powered video analytics, facility access control, and improved radio technology can be powerful tools for keeping schools safe. But if all of those tools are designed to operate alone, they will only create a bigger influx of data – in need of a coordinated solution to make it practically useful.

With the industry's largest R&D investment and an aggressive strategy of acquisitions and partnerships, Motorola Solutions has developed an integrated portfolio of applications, devices, and services to provide vital operational intelligence for campus protection – channeling a flood of emergency data into a steady stream of safety information.

These tools cover a wider area with better technology - enabling you to detect threats accurately, analyze data quickly, communicate information easily, and respond to incidents decisively.

In February of 2018, Motorola continued to build its portfolio by acquiring Avigilon, a leader in Video Security and Access Control. Avigilon designs, develops, and manufactures solutions in video analytics, cloud, security cameras, video management software, video management hardware, and access control solutions. Avigilon is an industry leader and, together with Motorola Solutions, provides integrated solutions for video security, access control, and critical communications.



Motorola-Avigilon Solution Narrative

Motorola-Avigilon understands Newport-Mesa Unified School District's need to consolidate and integrate access control, alarm monitoring and security video surveillance systems for the District as NMUSD welcomes students and staff back on campus. Through Motorola Solution's Safety Reimagined Solution, Newport-Mesa Unified will be able to unify their security systems into one ecosystem.

To help meet these challenges, Motorola-Avigilon Solutions is pleased to present this proposal for a next-generation School safety solution. As the industry leader in public safety communications, technology, and software, responsible for many Safe Schools solutions in California, including Irvine Unified. Motorola-Avigilon Solutions is ideally suited to meet Newport-Mesa Unified's safety communication requirements.

Our solution design uses high-resolution cameras, leading-edge mobile communications technology, and next-generation dispatch consoles, along with self-learning video analytics and artificial intelligence to help you detect threats more accurately, analyze data more effectively, communicate more efficiently, and respond to incidents more decisively. By adopting Motorola-Avigilon Solutions' proposal, Newport-Mesa Unified will accomplish its stated goals of increased safety and security, while upgrading current infrastructure and equipment to prepare for future needs.

The following pages provide a detailed description of the tools and applications that Motorola Solutions is proposing. To aid in understanding how these tools work together, the description has been organized under four strategic headings:



- Detect 
- Analyze 
- Communicate 
- Respond 

MANAGING TODAY'S CHALLENGES

“
How do we know
who's coming to our
school?”



DETECT

TipSubmit
Video Security
Licence Plate Recognition
Watchlist Alerting
Access Control

“
How do we keep
an eye on thousands
of students?”



ANALYZE

Appearance Search
Identity Search
Unusual Motion Detection
Focus of Attention
Self-Learning Video Analytics

“
How do we stay
connected and keep
people informed?”



COMMUNICATE

MOTOTRBO Two-way Radios
Radio Alert
WAVE Push-to-talk Communications
Communicator: Mass Notification
Ally Incident Management & Records

“
How can we provide
eyes-on-scene from
anywhere?”



RESPOND

Ally Dispatch
CommandCentral Aware
P25 Mission-Critical Communications
Critical Connect
Emergency Response Access Control

Each category provides a different kind of support, with tools that will give you better situational awareness, more insight into the data that is available, high-performance on-campus communication, and better responses to incidents.

DETECT



A school campus is a difficult place to keep safe. Threats can arise anywhere; but with limited resources and limited personnel, there's no way for school districts to cover everything all of the time. Giving students and faculty the protection that they need requires detection tools that can flag events for further investigation. With the right technology in place, personnel can see what's happening and act decisively to protect your community.

Anonymous tip submission – Learn about suspicious activities in the area.

Video security – Monitor for significant events site-wide.

License plate recognition – Detect unwanted visitors before they can enter.

Watch list alerting – Find and track known threats on campus.

Face mask detection – Proactive, real-time monitoring for face mask use.

Advanced, video-based detection technology can detect objects, classify them as human, and scan for protective face coverings. Policy violations trigger automated alerts.

Access control – Manage access to an area, blocking unauthorized persons from proceeding through entry points.

Contact tracing – For access-controlled areas, trace contacts with exposed students, teachers, and staff to quickly and effectively mitigate risk and curb the spread of infection.

Radio Connectivity - Send video, access control, and sensor alerts from Avigilon Control Center (ACC)™ software to your compatible MOTOTRBO™ radios. Eliminate the need for staffing a video wall and keep your security officers in the field.

Our solution can bring together the different facets of detection -the community, on-site cameras, and intelligent detection software-to keep your campuses, staff, and students safe.

Video Security

Video Security	
	
☐ One interface for viewing live video from across facilities. ☐ Records events for later reference. ☐ Intuitive, analytical interface. ☐ Recognition, watch list, and analytical capabilities to detect threats early.	

Strategically deployed video cameras and easy-to-operate software provide insight into who is on campus, where they have been, and where they are headed. This puts your team one step ahead of developing threats by directing attention where it belongs.

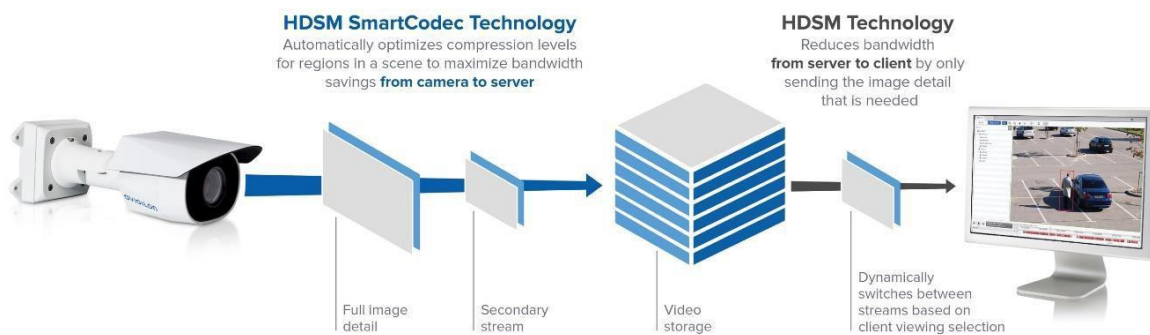
Avigilon cameras and software record and store video across facilities, using artificial intelligence to direct focus onto potential threats and abnormal events. The proposed video security system will increase situational awareness without creating excess data.

Staff will be able to view live video and review archived footage in a single video management application: Avigilon Control Center (ACC)™. The ACC software is easy to navigate and understand, and offers an additional native user interface called Focus of Attention (FoA). FoA uses color coding and markers to direct Newport-Mesa Unified users' attention to urgent alerts and key sections of recorded video.

FoA organizes cameras into site honeycombs, with nodes for each camera that indicate the status of a scene. Statuses include camera online/offline, motion detected, analytic event detected, face match event, license plate match event, and alarms pertaining to analytic rules or access control events. Staff can hover over a node or click through to view live video from that camera. When an alarm is generated in FoA, it pushes the video feed to the left-hand side of the screen, allowing the operator to view the incident

and determine proper response. ACC software archives recorded video with timelines, using time markers to indicate video relevant to the user.

The proposed cameras, chosen to address Newport-Mesa Unified's needs, include key video quality and hardware specifications. For situations that call for a high megapixel camera, Avigilon's patented High Definition Stream Management (HDSM)[™] technology reduces the bandwidth and storage needed, making efficient use of network resources.



Access Control Manager

Access Control Manager

☐ Enforces badge or biometric-based access to facilities. ☐ Represents events on facility maps, contextualizing alerts. ☐ Integrates with ACC, linking live or recorded video to access events. ☐ Temporary facility access

Knowing who belongs on campus is a powerful first step towards keeping unwanted visitors out. Badge and biometric scanners allow the administration to manage access to

any area by defining the credentials required for admission, times for appropriate access, and keeping track of lost or stolen IDs.

With an Avigilon Access Control Manager (ACM)™ system and access control devices, staff will be able to detect and prevent unauthorized or suspicious visitors from accessing restricted areas. ACM uses badge and biometric readers to match individuals with the permissions database and determine what areas they have access to. Temporary, timed access settings enable staff to issue access badges to visitors or restrict access to a badge that has been lost or stolen.

Access control settings are mapped to Newport-Mesa Unified facilities in ACM, visually representing access points and records. From the map, staff can control doors, monitor access solution hardware status, and check who has accessed an area. ACM links any reported events or alarms to the map. Mapping places events in context and makes it easy to access details.

Combining an ACM system with Avigilon cameras and ACC software adds visual context to access records and helps detect potential or in-progress attempts to breach security. Security personnel can use cameras at an access point to verify the identity of someone attempting to enter an area. To easily locate video of any past access attempts, ACC tags recorded video of access events detected by ACM.

The proposed video and access control capabilities will funnel detected information into AI analytics, transforming those alerts into actionable intelligence.

Radio Connectivity with Orchestrate

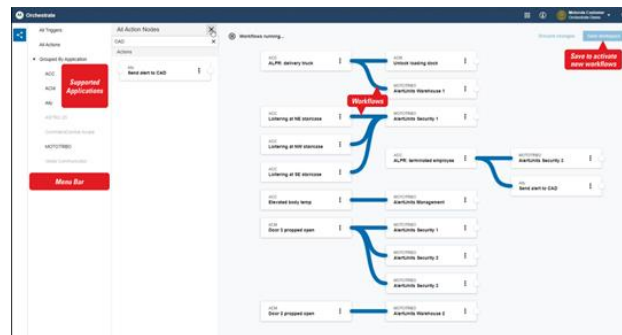
Radio Connectivity	
	
☐	Automatically alerts users via radio.
☐	Alerts include event details.
☐	Alerts can require user acknowledgement.

Radio connectivity proactively notifies staff members of unusual activity, potential threats, and possible hazards by sending voice, text and/or video alarms from Avigilon ACC software to MOTOTRBO radios. A range of events can be configured to trigger radio messages, including video analytics events, license plate watch list matches, unauthorized attempts to access a site, sensor events, and custom flags. The resulting message informs recipients of what event triggered the alert, and where that event took place.

Radio messages inform staff of suspicious activity without needing to monitor activity on a computer screen. Security personnel can patrol the premises and investigate any alerts they receive on their MOTOTRBO radios. Other members of staff can also receive alarm notifications, automatically communicating potential security information to them so they can take appropriate actions. The connection also accepts messages from MOTOTRBO radios, enabling staff to acknowledge that they have received an alert.

Orchestrate

Creating and automating workflows for a comprehensive incident response and school safety solution is complicated. Orchestrate simplifies it. Orchestrate is a cloud-based platform that connects across voice, data, video, software, and analytics, helping administrators to control their integrated technology ecosystem more effectively. Using its intuitive, drag-and-drop user interface, administrators can create rule-based, automated workflows to enhance efficiency, shorten response times, and improve overall safety.



ANALYZE

With so many people on campus, it can be hard to know what's really a threat. Administrators and teachers are always on the lookout, but even the best personnel cannot predict the future. Schools need a way to sort through the data and find the information that points to a developing incident. Avigilon's self-teaching AI applications help administrators to understand available data and deploy resources as needed – before threats have a chance to develop.

Motion detection and Focus of Attention capabilities – Monitor low-traffic areas for intrusion and immediately capture information about possible threats.

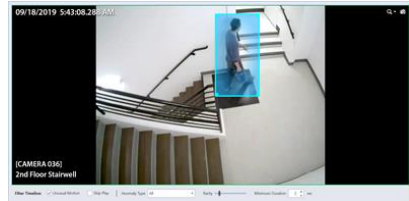
Appearance and identity search – Organize event responses more quickly, sorting through video records to locate footage of known threats.

Video analytics – Scan the campus in real time for evidence of developing incidents.

Elevated temperature detection - Locate individuals with symptoms of an illness to screen entry and avoid outbreaks.

Ultimately, these solutions and insights are crucial to cutting through the noise, proactively locating points of interest and recognizing which events are important – so you can have eyes on the scene to evaluate and make an informed decision to take action. Together, this suite of applications applies pattern recognition, search, and self-learning capabilities to make your staff more effective at identifying potential threats.

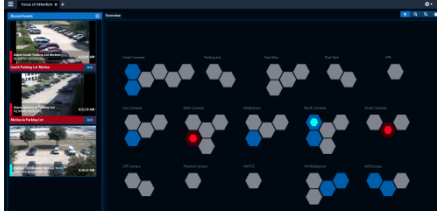
Unusual Motion Detection

Unusual Motion Detection	
	
☐	Alerts staff to unusual activity patterns.
☐	Classifies alerts by type, rarity, and duration.
☐	Shifts staff away from passive video monitoring.

Schools operate based on rigidly timed schedules, and students follow well-defined traffic patterns. Knowing what to expect helps to identify irregular activity and may offer insight into developing security threats.

With ACC software's Unusual Motion Detection (UMD) technology, artificial intelligence takes on the mind-numbing task of monitoring areas for abnormal activity. UMD filters out video feeds of routine footage, focusing staff on potential threats or abnormal activity. This feature uses recorded video to establish a typical motion pattern in an area without user input. UMD then alerts staff members if it detects motion that does not fit that pattern. Pattern recognition develops over a period of up to two weeks and, once established, flags areas based on abnormal movement. ACC software logs events based on detected movement anomalies, and tags video of an event for later reference. Staff can search for events based on type, as well as event rarity and duration.

Focus of Attention

Focus of Attention	
	
☐	Overview of system status at a glance.
☐	Directs staff attention to video of important events.
☐	Quick access to alert details

With a flood of video footage from across campus, your staff cannot watch and analyze video from every camera. ACC's interface uses AI analysis to filter out camera feeds showing routine activity and direct your staff's focus to areas where their evaluation of events is crucial.

The ACC interface uses color-coded camera tags to direct staff members' attention to the most pressing ongoing events. Each camera's detection status is displayed on the "Overview" screen of ACC, providing staff members with a clear picture of the state of events across sites. When a camera reports an event, staff can select it in the interface to actively view video from it. Events use a specific color to let staff know what a camera detected, helping them determine what camera video feeds to actively view.

Appearance Search

Appearance Search	
	
☐	Locates video of a person or vehicle based on characteristics.
☐	Video bookmarking.
☐	Video sharing.

Building a record of locations and activities for unwanted or suspicious visitors can be critical for understanding how to respond, or for helping outside agencies to respond more effectively. Avigilon Appearance Search™ technology reviews hours of video in minutes to find a person or vehicle based on appearance characteristics. This saves time for staff members, reduces response times, and reduces the potential for human error. Criteria for finding people include: clothing color, gender, hair color, and age category, with categories for adults and children. Criteria for vehicles include: color, model, and type of vehicle. Available vehicle type categories include: car, bus, truck, motorcycle, and bicycle. Whether searching for a specific individual or an unknown person based on a partial description, staff can narrow results down to relevant video. Equipped with this technology, personnel can zero in on a person or vehicle of interest and follow their activities as long as they are in the building.

After locating relevant video, staff can play and bookmark it, building a narrative related to persons of interest. If needed, staff can export and share video, images, search results, or bookmarked narratives from ACC software.

Identity Search

Identity Search	
	
☐	Locates video using ID records.
☐	Search refinement options.

To effectively control access to school facilities, your staff needs to be able to verify the identity of cardholders and quickly locate any imposters. Linking facility access attempts with recorded video makes it easy for staff to determine if a badge has been stolen or if an abnormal access attempt represents a developing threat.

Identity Search combines the facility protection capabilities of ACM with video analytics included with ACC software. Using a person's name or badge ID, staff can retrieve a record of a person's movements within Newport-Mesa Unified' facilities based on what doors they attempted to open. Staff can refine results by changing what doors to include results for and setting a date range for access events.

Self-Learning Video Analytics

Self-Learning Video Analytics	
	
☐	Key object and motion classification in video.
☐	Improved alert accuracy over time.
☐	Accepts user feedback to learn faster.

Artificial intelligence can enhance your team's surveillance capabilities by reviewing hours of video input to "learn" what to expect and identify pattern disruptions that may indicate a developing threat or hazard.

The self-learning feature supports Avigilon video analytics, better recognizing people and vehicle movement patterns over time without user input to provide more accurate alerts. Video analytics review past motion detection events to build up patterns that indicate whether a person or vehicle is in motion. Video analytics use those patterns to filter out background movement. In addition to reducing false alarms, self-learning analytics simplify searching archived video. Video analytics highlight videos with moving people or vehicles, filtering out video of unimportant background movement.

Though Avigilon video analytics learns patterns without input, staff can help speed the learning process and improve object classification using the Teach by Example function. With this function, staff apply markers to recorded video of a moving person or vehicle so that video analytics can compare that footage with live video. As more markers are added in different environmental conditions, video analytics becomes increasingly accurate in classifying people or objects in motion.

Elevated Temperature Detection

Elevated Temperature Detection	
	
☐	Alerts staff if an individual with an elevated temperature is detected.
☐	Smart analysis focuses camera on faces and filters out other heat sources.

Sometimes, the most potent threat to students and teachers is illness. If undetected, it can spread across campus, putting some at risk. With the H4 Thermal Elevated Temperature Detection camera, Newport Mesa Unified can more efficiently screen individuals for elevated temperatures.

The Avigilon H4 Thermal Elevated Temperature Detection camera is embedded with edge-based analytics to detect faces, measure the temperature of the inner canthus region, and notify operators if individuals exhibit indications of elevated body temperature. This security-grade thermal camera provides a contactless alternative to traditional screening methods. It enables high throughput pre-screening of people to detect indications of elevated body temperature to keep facilities, and those within them, safe.

The H4 Thermal Elevated Temperature Detection camera works seamlessly with ACC video management software. Elevated temperature events can be configured in ACC, as well as end-to-end workflows for monitoring, assigning, and acknowledging elevated temperature alarms.

COMMUNICATE



A well-protected campus requires a well-directed team of teachers and officers who work together to keep kids safe. But personnel cannot always communicate easily. This requires tools that unify communications and improve situational awareness.

MOTOTRBO™ two-way radio technology – Keep staff connected in hard-to-navigate environments.

Nitro™ - Flexible broadband data network architecture to support Newport-Mesa Unified's key applications in specific areas.

WAVE™ (Push-to-talk capability) – Personal and group communication between radios and connected phones, tablets, and other smart devices.



Dispatch applications to coordinate resources – Equips dispatchers with voice communications so they can inform personnel of an incident and direct a response to resolve it.

Mass notifications - Simultaneously communicate information to the groups that need it.

Communication – across devices and locations – is an important part of keeping you and your entire team aware and always informed. Our end-to-end communications solution can combine voice and data to enable a full understanding of potential incidents and, if possible, prevent them from occurring.

RESPOND



Some incidents cannot be prevented but getting caught flat-footed makes incidents worse. School administrators and communities need a solution that mobilizes emergency responses immediately and disseminates real-time incident details to on-campus personnel. A robust suite of integrated emergency response technology and applications can get help where it's needed, coordinate onsite operations more effectively, and save lives for your community.

Command Central Aware Enterprise - View information in one interface, simplifying intelligence development.

ALLY incident management - Respond to fluid situations with immediate access to new developments as they happen.

Critical Connect - Cloud-based interoperability solution to unify communications with public safety partners and enhance collaboration for a unified response.

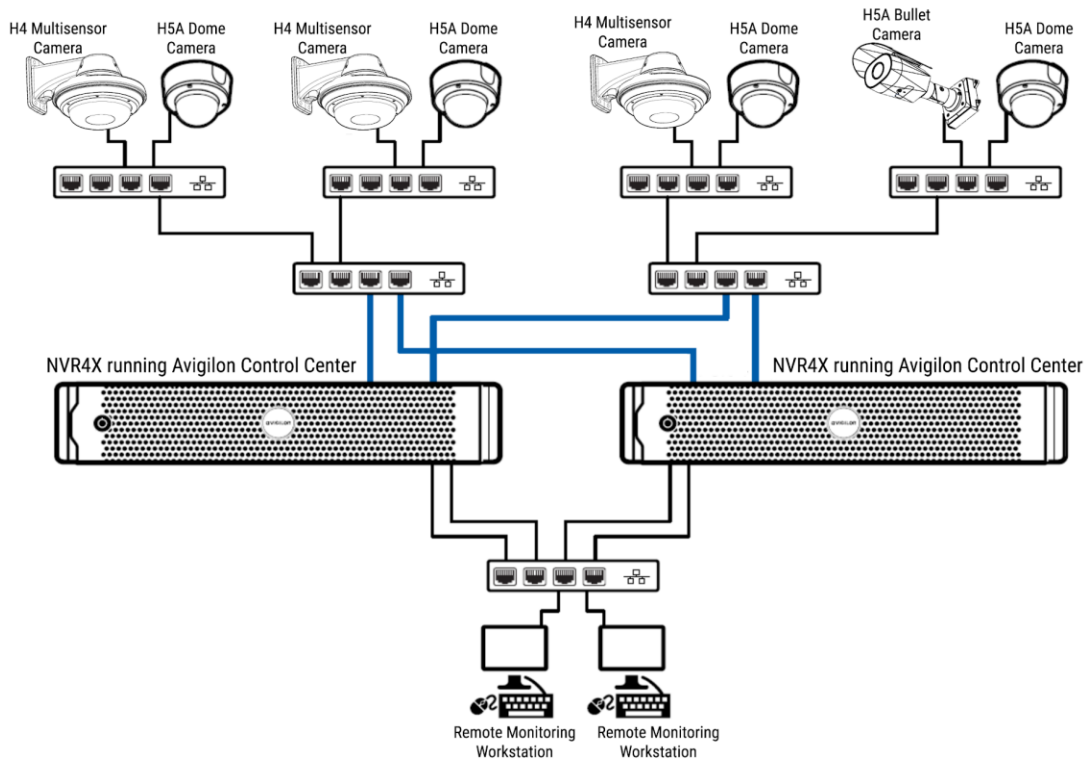
Connection to Law Enforcement – Use Command Central Aware to provide situational awareness for first responders by sending data to local law enforcement during an escalated incident.

Body-worn cameras - Record or stream video of emergencies and security incidents, creating a record of actions and a clearer understanding of events.

Access control to mitigate emergencies – Dynamically alter access permission to vulnerable or critical areas during emergencies, blocking access to potential threats.

These tools help make certain the right resources are sent to an event, and that those resources have the most up-to-date information necessary to remedy the situation

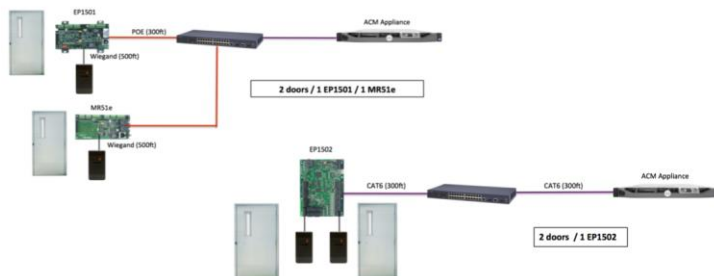
Sample Network Topology for ACC



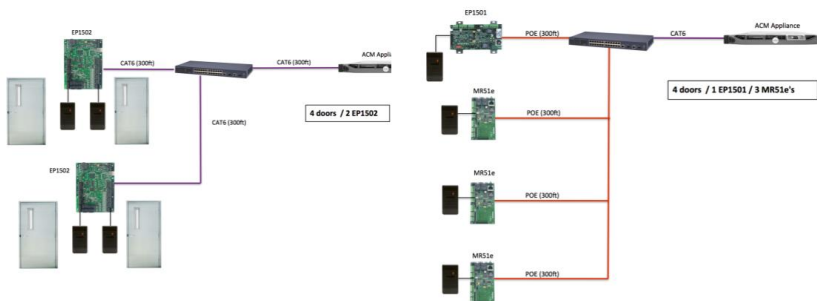
Sample Topology for ACM

2 Door Sample Designs

AVIGILON
A Motorola Solutions Company

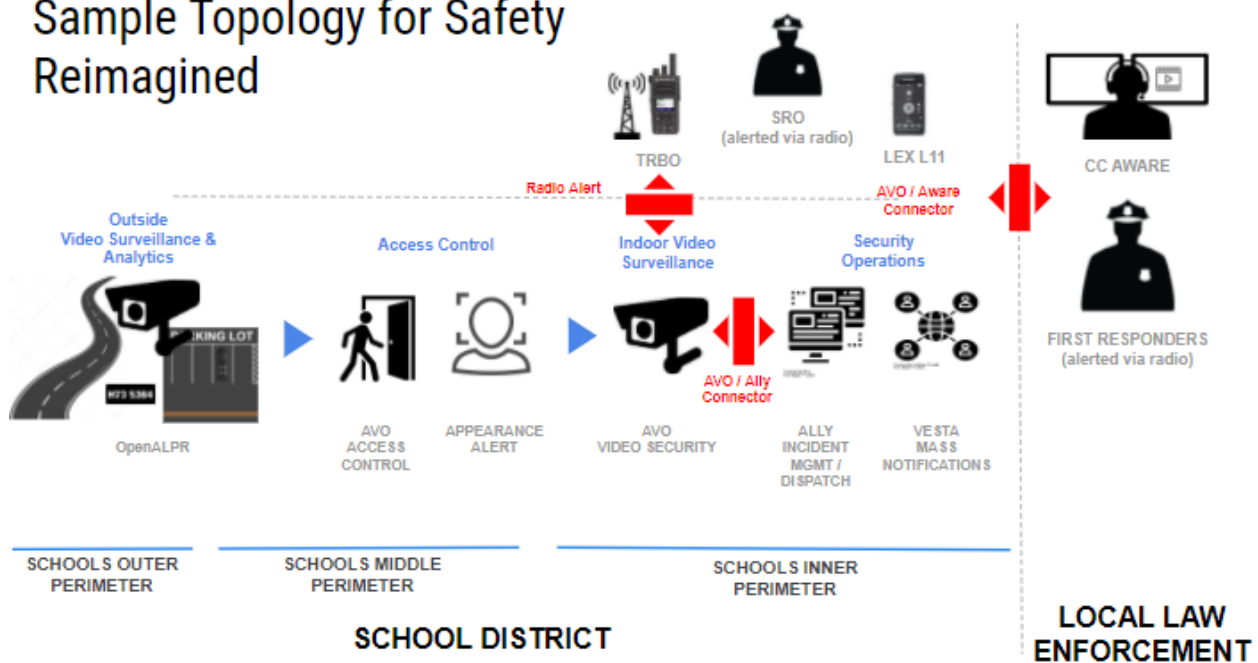


4 Door Sample Designs



Confidential and Proprietary - Internal Use Only
© 2015, Avigilon Corporation. All rights reserved. No license is granted with respect to any copyright, industrial design, trademark, patent or other IP rights of Avigilon or its licensors.

Sample Topology for Safety Reimagined



Glossary

NVR4X - 4th generation Avigilon Networked Video Recorder. Provides secure, reliable and scalable platforms for high performance end-to-end security solutions. All NVRs are preloaded with Avigilon Control Center (ACC) for secure network video recording and management of multi-megapixel IP cameras and have storage capacities up to 217TB.

Remote Monitoring Workstation - Avigilon's Remote Monitoring Workstations are purpose-built to accompany Avigilon's Network Video Recorders (NVRs) or to expand and scale existing deployments with a cost-effective high-performance workstation for remote monitoring. Designed to work seamlessly with Avigilon Control Center™ video management software, the Remote Monitoring Workstations enable users to view high-definition video streams on multiple monitors or video walls.

H4 Multisensor Camera - The H4 Multisensor camera line combines Avigilon self-learning video analytics with exceptional coverage, featuring 3 or 4 individually configurable camera sensors that can be positioned to monitor 180°, 270°, or 360° fields of view. With up to 32 MP effective resolution, the H4 Multisensor can provide the image quality needed to cover larger areas with excellent detail.

H5A Dome Camera - A camera in Avigilon H5A camera line in a dome form factor which features our embedded Next-Generation Video Analytics for enhanced object detection, tracking and classification, Unusual Activity Detection (UAD), and support for Avigilon Appearance Search™ technology to help ensure critical events do not go unnoticed. Comes in either 2MP, 4MP, 6MP, or 8MP resolutions.

H5A Bullet Camera - A camera in Avigilon H5A camera line in a bullet form factor which features our embedded Next-Generation Video Analytics for enhanced object detection, tracking and classification, Unusual Activity Detection (UAD), and support for Avigilon Appearance Search™ technology to help ensure critical events do not go unnoticed. Also features IR ranges up to 295 ft. depending on lens type. Comes in either 2MP, 4MP, 5MP, 6MP, or 8MP resolutions and focal lengths up to 22mm.

Next-Generation Video Analytics - Avigilon's most advanced analytics technology uses neural networks to power self-learning video analytics, delivering improved accuracy in both

perimeter protection and in crowded, indoor environments. Added processing power enables the tracking and classification of over 50 objects within a field of view. More processing power enhances Avigilon Appearance Search™ technology by expanding the ability to search for a person or vehicle in both crowded and indoor environments. Avigilon video analytics not only classifies people and vehicles but can also classify vehicles into subtypes which include car, truck, bus, motorcycle, and bicycle. Allowing a user to search for events specifically generated by people or vehicle types can increase efficiency and reduce investigation times.

Appearance Search - Avigilon Appearance Search™ video analytics technology is a sophisticated deep learning AI search engine for video. It sorts through hours of video with ease, to quickly locate a specific person or vehicle of interest by entering physical descriptions, uploading a photo, or by finding an example within recorded video. Appearance Search can improve incident response time and enhance forensic investigations by helping operators compile robust video evidence, create a powerful narrative of events, and reveal a vehicle or individual's route or last-known location.

UAD - Unusual Activity Detection (UAD) provides new edge-based intelligence that uses advanced AI technology. It is designed to enable the detection of atypical activities, such as people and vehicles travelling at faster speeds or are in unusual locations and alert operators.

ACC - Avigilon Control Center (ACC) software is an easy-to-use video management software that is designed to optimize the way security professionals manage and interact with high-definition video. It efficiently captures and stores high-definition video, while intelligently managing bandwidth and storage using our patented High Definition Stream Management (HDSM) technology.

HDSM - High-Definition Stream Management is a stream management technology that drastically reduces serve-client bandwidth requirements and makes optimal use of client computing resources, enabling greater scalability and increased camera resolution. HDSM technology stores the video information on the server as small packets. Simultaneously, HDSM separates the video into multiple usable segments: lower resolution and smaller size streams for situational awareness, and much larger streams for full image detail. HDSM then intelligently manages these streams based on what the user is viewing

ACM - Avigilon Access Control Manager™ 6 Enterprise and Enterprise Plus Systems The Access Control Manager (ACM) system is an IT-friendly Physical Access Control System (PACS) from Avigilon for enterprise-class installations. It's a complete access solution that is designed to keep your focus on securing your people, property and assets, and maximizing your time by helping you respond immediately to alerts wherever you are. The ACM™ system is a browser-based solution that can integrate with existing IT/HR systems, minimizing the need for duplicate data entry. It comes with a full set of standard features that not only help to maximize your time but will reliably safeguard your information.

ACM Virtual - Avigilon Access Control Manager™ 6 Virtual is a physical access control system (PACS) that is VMware Ready™ for deployment in a virtual server environment, eliminating the need to maintain a separate, stand-alone server or dedicated network appliance. Access Control Manager Virtual is purpose-built for organizations that have migrated their IT infrastructure to a secure, private cloud environment, allowing them to maintain enterprise-grade physical security without the risk of storing sensitive information on a shared server hosted in a public cloud.

LP1501 - Intelligent Controller; Linux Based with 1 door; 2 inputs and 2 outputs; PoE+ Support; expandable up to 17 doors. (Mercury Part #: LP1501)

LP1502 - Intelligent Controller; Linux Based with 2 doors; 8 inputs and 4 outputs; expandable up to 64 doors. (Mercury Part #: LP1502)

MR62e - Reader Interface Module with 2 doors; 4 inputs and 4 outputs; PoE+ Support. (Mercury Part #: MR62e)

Ally-Ally is a cloud-based incident and records management software product that collects security data in a single database. The Incidents page includes standard forms, using pre-set fields to create complete and consistent records. With customization options for certain fields, Ally Incident forms can be changed to collect specific information your staff and decision-makers need.

RFI Questionnaire

I. General Requirements	
A. Deploy systems and integration with the best value to the District	Avigilon's Access Control Manager (ACM) and Avigilon Control Center (ACC) have been deployed at many school districts across North America. ACC's total cost of ownership is lower compared to other solutions because of how our software is licensed. Our channel licenses are a one time purchase. We do not have annual recurring fees for incremental version updates (e.g. from v7.00 to v7.99) or technical support. We also offer a 5 year advance replacement warranty on our cameras and NVRs. No training fees. One time licensing rather than annual recurring fees
B. Implement proven and reliable technology	ACM supports field hardware produced by Mercury Security which has the largest installed base of any OEM Access Control panel manufacture and has been in business since 1992.



	The H5A camera line features our next-generation video analytics technology to help focus your attention on potentially critical events, providing a smarter and more powerful video security solution from the moment you set it up. 5 Year warranty included. https://www.avigilon.com/products/cameras-sensors/ https://www.avigilon.com/products/video-infrastructure/nvr https://www.avigilon.com/products/ai-video-analytics/ When connected to Avigilon Control Center (ACC) software, the Avigilon AI Appliance adds patented Avigilon self-learning video analytics and Avigilon Appearance Search™ technology to almost any IP camera. Fourth-generation Avigilon Network Video Recorders (NVRs) offer our highest capacity, retention and throughput to provide secure, reliable and scalable platforms for high-performance security solutions. NVR4s come standard with optimized recording technology, a three-year Avigilon limited warranty with dedicated support and numerous additional features, including Avigilon Appearance Search technology.
C. High to medium-high system maturity level	Avigilon's products have been manufactured, sold, and deployed since 2006.
D. Scalable	ACM supports up to 2048 doors on a single server (or virtual instance). You



	can grow beyond this by adding additional ACM instances for limitless scalability. ACC can support >300 cameras per server, >10,000 cameras per site, and >100 servers per site. Although no limits are imposed by licensing, actual limits will depend on the hardware environment. Avigilon has tested up to the numbers indicated. Additionally, Avigilon's storage solutions can scale up to 1.5PB, if necessary.
E. Flexible – communication/ issues at individual schools. Some have better connections than others.	ACC can operate in low bandwidth networks because of our High-Definition Stream Management (HDSM) technology, which sends you only the portion of the image that you need. That means you get incredible image quality and resolution with only a tiny amount of bandwidth and storage. HDSM is all about intelligently managing bandwidth and storage, which means that you never have to worry about adding more megapixels. HDSM keeps file sizes small, so you can add cameras while keeping bandwidth and hardware needs low. Using less data and less bandwidth means you can scale up while keeping costs down, with minimal impact on network resources.
F. Serviceable by NMUSD staff	NMUSD staff can contact Avigilon technical support directly via phone and email. Avigilon also provides free online training and an online help center for both video and access control, which can be found at help.avigilon.com



G. Simple and efficient integration	Avigilon cameras and ACC conform to ONVIF standards. ONVIF is a global and open industry forum with the goal of facilitating the development and use of a global open standard for the interface of physical IP-based security products. ONVIF creates a standard for how IP products within video surveillance and other physical security areas can communicate with each other.
H. Support for wireless solutions	Avigilon cameras can operate on wireless networks, provided there is sufficient throughput and reliable connectivity, but wired networks are preferred.
I. Compatible with District's HP servers	Avigilon recommends using Avigilon branded servers, because they are purpose built to provide secure, reliable, and scalable platforms for high-performance security solutions, but ACC can run on 3rd party servers, including HP, provided that they meet or exceed our recommendations.
J. Deployable in a virtual server environment	Avigilon ACM: ACM Virtual is a Certified VMware Ready solution designed for deployment on a virtual server, maintaining scalable design while reducing capital and operating expenditures Avigilon ACM also has upcoming support for Hyper-V.



	Avigilon ACC: Avigilon has not done any formal testing with virtualization. You will generally get better performance running ACC within a native host OS on a physical server, but as long as the ACC Server process is allocated sufficient resources more than the recommended system requirements, there should not be any issues. Allocate additional resources (CPU and memory) to the virtual machine for ACC Server. You need to consider the virtualization overhead when you plan for the hardware of your host server.
K. Active Directory integration	ACM supports Active Directory integration via LDAP. ACC supports Active Directory integration.
L. Multiple local integrators (single regional integrator is not acceptable)	There are multiple Avigilon partners in the Southern California Region including Blue Violet which is Avigilon's Largest K-12 contractor with 100 schools in Orange County with a sold CMAS contract.
M. Direct manufacturer support	Avigilon offers direct support for sales and support from regional teams and direct 24/7 end user tech support via our +1 888-281-5182 number. All services are at no additional cost.
N. No sole source equipment	Avigilon products can be purchased from any of our partners in the region.



O. Strong cyber-security support – Manufacturer responses must discuss cyber-security plan in response and also explain how firmware updates are performed	When using Avigilon cameras along with Avigilon ACC software, camera firmware is automatically pushed out to connected cameras as a part of the software update process. Users can optionally choose to defer these updates, although it is not recommended. Firmware can also be updated as a batch operation using Avigilon's Camera Configuration Tool, or by logging directly into a camera's web interface. See attached flyer in <u>supplemental documents</u>
P. No biometrics	Facial recognition is an optional, paid (licensed) feature of ACC. It is not available by default.
Q. Audio capability 1. Voice communication capability desired but voice recording will be disabled per District policy	Avigilon cameras come with an audio input and output for connecting external microphones and speakers. A few of our camera models come with a built-in microphone. Voice recording can be turned on or off in the ACC Client software.

II. Access Control

A. Access control technology not susceptible to cloning	ACM allows the use of secure, encrypted credentials in a variety of technologies. ACM fully supports OSDP for secure and supervised reader communications.
B. Proximity technology access cards (contactless smartcards)	ACM fully supports contactless smart card technology

C. Support for wireless solutions	Wireless Lock Support for Allegion, Assa Abloy & Salto.
D. Lockdown controls	ACM provides a single button-quick emergency lockdown of all entry points in case of emergency (external threat, etc.) And also allows for handling multiple emergencies simultaneously.
E. Integration with Intrusion Detection Systems	Supported
F. Consideration for future Cloud deployment	Yes
G. Mercury Security or similar intelligent panels available to multiple manufacturers (panels supported by only one system software manufacturer are not acceptable)	Our system works with Mercury Security.

III. Video Surveillance

A. Consider integration with Police Department	We would need to know what video system the Police Department currently uses to determine what kind of integration is possible, but our system can be set up to be accessed by the Police Department through Avigilon Cloud Services (ACS), either through a web browser connection or by using our mobile application.
B. Local video recording server at each site	Video is recorded to on-premises NVRs.

C. Redundancy/backup	Avigilon NVRs are configured for either RAID 60, RAID 6, or RAID 5. Cameras can be configured to record to failover servers if the primary server fails or loses connectivity.
D. Public monitor in admin waiting area	A workstation running the ACC Client or ACC Virtual Matrix can be displayed on a monitor in the admin waiting area.



E. Support for video analytic	Avigilon's H5A cameras and H4A multi-sensor cameras come with Avigilon self-learning video analytics features for object detection and classification for live or forensic events. These analytics include: • Objects in Area • Object Loitering • Objects Crossing Beam • Object Appears or Enters Area • Object Not Present in Area • Objects Enter Area • Objects Leave Area • Object Stops in Area • Direction Violated • Camera Tampering • Social Distancing (H5A Only) • Occupancy Counting When H5A cameras or H4A multi-sensor cameras are paired with the appropriate NVR, ACC can generate events/notifications when it detects a person not wearing a mask and can perform Appearance Searches, which allows a user to search for people or vehicles based on physical characteristics.
-------------------------------	--

IV. Video Recording	
A. Standard video compression (H.264/H.265)	Avigilon H5A and H4 Multisensor cameras support both the H.264 and H.265 codecs. This can be configured on a per camera basis.



B. 45 days recorded video	The system will be designed with the appropriate server or servers to achieve the required video retention.
tion sense recording	Motion detection can be used to trigger video recording. You can also configure the system to generate motion events that can be used when searching video or to trigger notifications and rules. There are two types of motion detection available: Classified Object Motion Detection analyzes the video and only reports the motion of vehicles or persons. This option is only available to Avigilon self-learning video analytics devices. Pixel Motion Detection observes the video stream as a whole and considers any change in pixel as motion in the scene. This option is available to most cameras that are connected to the system.
D. 5-10 frames per second recording rate	Avigilon's cameras are capable of recording up to 30 frames per second (fps), depending on the camera model. The recording rate can be configured on a per camera basis.

V. Video Cameras

A. Vandal resistant camera housings that conceal direction of view	Avigilon's H5A Indoor and Outdoor domes and bullets have an IK10
--	--

	impact rating. The H4A surface and pendant mount multi-sensor cameras also have an IK10 impact rating. Optional dome and multi-sensor camera covers with a smoked bubble can be purchased to be used instead of covers that have a clear bubble.
B. Minimum 3 Megapixel resolution	Avigilon's H5A cameras come in resolutions up to 8MP. H4A Multi-sensor cameras come in resolutions up to 8MP per sensor.
C. Onboard storage	Avigilon's H5A cameras and H4A multi-sensor cameras come with either a microSD or SD slot depending on the camera form factor.

VI. Intrusion Detection	
A. Support existing Ademco/Honeywell systems	Can be interfaced using outputs and inputs.
B. Integration with the Access Control System to provide for disarming the Intrusion Detection by presenting access credentials to record an audit trail	Supported with Intrusion Detection interfacing.

Additional RFI Response Requirements

Similar and Completed Solution Deployments in K-12 Schools with 20,000 ADA or higher From Blue Violet Networks

II. References

II.A IRVINE VALLEY COLLEGE – (2) LOCATIONS
Orange County of Education Approved



Contact Name Anna Petrossian
Contact Phone 949-541-5708
Address 5500 Irvine Center Dr., Irvine CA 92618

II.B IRVINE UNIFIED SCHOOL DISTRICT – (48) LOCATIONS

Orange County of Education Approved

Contact Name Don Grudham
Contact Phone 949-936-5350
Address 4861 Michelson Drive, Irvine, Ca,

II.C OAK PARK UNIFIED SCHOOL DISTRICT – (8) LOCATIONS

Contact Name Enoch Kwok
Contact Phone 818-735-3201
Address 5801 Conifer St., Oak Park, CA 91377

II.D TUSTIN UNIFIED SCHOOL DISTRICT – (32) LOCATIONS

Orange County of Education Approved

Contact Name Tom Rizzuti
Contact Phone (949) 293-4850.
Address 1302 Service Road, Tustin, CA 92780

II.E FULLERTON UNIFIED SCHOOL DISTRICT – (28) LOCATIONS

Orange County of Education Approved

Contact Name Sam Ricchio
Contact Phone 714-447-7483
Address 1401 Valencia Dr, Fullerton CA, 92833

II.F MOUNT SAN JACINTO COLLEGE - (4) LOCATIONS

Contact Name Eric Muehlebach
Contact Phone 714-447-7483
Address 28237 La Piedra Road, Menifee, Ca 92584V.

III. Experience

III.A IRVINE UNIFIED SCHOOL DISTRICT – MULTI-PHASE VIDEO SURVEILLANCE PROJECT

Orange County of Education Approved

Project Value: \$3,100,000

Provision and installation in multiple phases over 5 years. Project includes (720) cameras and (48) NVR servers to support (43) schools/departments with more than 49,000 students. Project included structured cabling and wireless gigabit point-to-multipoint radio links.

III.B TUSTIN UNIFIED SCHOOL DISTRICT – DISTRICT VIDEO SURVEILLANCE AND ANALYTICS PROJECT

Orange County of Education Approved

Project Value: \$525,000

Provision and installation of more than (200) cameras and (2) 128 TB NVR servers at Districts Data Center to support (8) schools/departments with more than 28,000 students. Project included structured cabling and wireless gigabit point-to-multipoint radio links. This an ongoing project to complete the other (30) plus schools as funds permit.

III.C IRVINE VALLEY COLLEGE – CAMPUS WIDE VIDEO SURVEILLANCE AND ACCESS CONTROL PROJECT

Orange County of Education Approved

Project Value: \$6,725,000

Installation of (268) cameras and (789) access control doors in interior and exterior locations, including (36) pole-mounted parking lot 360-degree multi-sensor cameras and wireless gigabit point-to-multipoint radio links to surrounding buildings. Provision and installation of (6) 128TB Avigilon Premium NVR servers, integrated with (1) VMware Access Control Manager (ACM).

III.D FULLERTON UNIFIED SCHOOL DISTRICT – MULTI-PHASE DISTRICT VIDEO SURVEILLANCE UPGRADE

Orange County of Education Approved

Project Value: \$205,000

Provision and installation of more than (50) cameras and IP speakers, (1) 28 TB NVR servers at Districts Data Center to support (8) schools/departments with more than 14,000 students. Project included structured cabling. This an ongoing project to complete the other (28) plus schools as funds permit.

III.E WESTMINSTER POLICE DEPARTMENT – VIDEO SURVEILLANCE UPGRADE PROJECT

Project Value: \$195,000

Provision and installation of (87) cameras, PoE injectors, ethernet cabling, wireless point-to-point links, (2) 96TB NVR-4 Premiums, incorporating systems at Police Department, City Hall, Community Centers, Shooting Range, and the City Yard.

III.F CENTRALIA UNIFIED SCHOOL DISTRICT – VIDEO SURVEILLANCE UPGRADE PROJECT

Orange County of Education Approved

Provision and installation in (30 plus) cameras, (8) 24 TB NVR servers support (8) schools more than (4,500) students. This an ongoing project to complete as funds permit.

See Sample BVN's CMAS Quote the end of RFI

Budgetary Costs for Purchasing

At Avigilon, we work with our local integrators to meet the needs of Newport-Mesa. **In order to give accurate pricing**, there are a number of factors that will affect the overall solution (for instance: obstructed views, amount of area needed to be covered, corners, lighting, megapixels needed per area etc.). We will work closely with Newport-Mesa Unified to give you the fewest cameras with the most coverage as well as the best solution for access control. Before giving accurate pricing, a site walk would be needed to give an accurate estimate. As mentioned, there are no recurring fees with Avigilon and free online training and support are included.

Pricing should be considered when given by a partner integrator. Avigilon can negotiate pricing and special district wide discounts to all partners so Newport-Mesa Unified will receive a fair price across the board. Below is a sample setup for a high school with MSRP (not including integrator or partner discounts):

Model Name	Description	MSRP
2.0C-H5A-DO1-IR	2.0 MP (1080p) WDR, LightCatcher, Day/Night, Outdoor Dome, 3.3-9mm f/1.3 P-iris lens, Integrated IR, Next-Generation Analytics	\$1,000
2.0C-H5A-D1-IR	2.0 MP (1080p) WDR, LightCatcher, Day/Night, Indoor Dome, 3.3-9mm f/1.3 P-iris lens, Integrated IR, Next-Generation Analytics	\$850
4.0C-H5A-DO1-IR	4.0 MP WDR, LightCatcher, Day/Night, Outdoor Dome, 3.3-9mm f/1.3 P-iris lens, Integrated IR, Next-Generation Analytics	\$1,142
4.0C-H5A-D1-IR	4.0 MP WDR, LightCatcher, Day/Night, Indoor Dome, 3.3-9mm f/1.3, P-iris lens, Integrated IR, Next-Generation Analytics	\$992



4.0C-H5A-BO1-IR	4.0 MP WDR, LightCatcher, 3.3-9mm f/1.3 P-iris lens, Integrated IR, Next-Generation Analytics	\$1,142
5.0C-H5A-BO2-IR	5.0 MP WDR, LightCatcher, 9-22mm f/1.6 P-iris lens, Integrated IR, Next-Generation Analytics	\$1,245
6.0C-H5DH-D1-IR	2x 3MP H5A Dual Head Camera. Indoor camera with built-in IR, Next-Generation Analytics	\$1,300
10.0C-H5DH-D1-IR	2x 5MP H5A Dual Head Camera. Indoor camera with built-in IR. Next-Generation analytics.	\$1,500
15C-H4A-3MH-180	3x 5 MP, WDR, LightCatcher, 4mm, Camera Only	\$1,800
15C-H4A-3MH-270	3x 5 MP, WDR, LightCatcher, 2.8mm, Camera Only	\$1,800
20C-H4A-4MH-360	4x 5 MP, WDR, LightCatcher, 2.8mm, Camera Only	\$2,100
ACC7-ENT	ACC 7 Enterprise Edition camera license	\$290
POE-INJ2-60W-NA	Indoor single port Gigabit PoE++ 60W	\$150
H4-MT-POLE1	Pole mount adapter for use with H4A-MT-WALL1, H4-BO-JBOX1, H4SL, H4F, H4 PTZ, H4 IR PTZ and H4 Multisensor cameras.	\$90
H4-BO-JBOX1	Junction box for the H4A HD Bullet, H4SL HD Bullet, or H4 Thermal cameras.	\$90
H4AMH-AD-IRIL1	Optional IR illuminator ring, up to 30m (100ft), for use with H4AMH-DO-COVR1.	\$330
IRPTZ-MNT-WALL1	Pendant wall mount adapter. For use with H4 IR PTZ or H4A-MH-AD-PEND1 on H4 Multisensor.	\$95
H4AMH-DO-COVR1	Dome bubble and cover, for outdoor surface mount or pendant mount, clear.	\$160
H4AMH-AD-PEND1	Outdoor pendant mount adapter.	\$160
H4-MT-CRNR1	Corner mount adapter for use with H4A-MT-Wall1, H4-BO-JBOX1, H4SL, H4F, H4 PTZ, H4 IR PTZ and H4 Multisensor cameras.	\$90
NVR4X-STD-48TB-S16-NA	NVR4X Standard 48TB 2U Rack Mnt, Windows Server 2016, NA	\$24,960



QTY	Model Name	Description	MSRP	Line Total
1	AC-APP-64R-ENT2-6	Access Control Manager Enterprise 6 – Web- Based PACS Enterprise Appliance for 64 Intelligent Controller, Linux Based with 2 doors,	\$ 6,166.00	\$ 6,166.00
1	AC-MER-CONT-LP1502	8 inputs and 4 outputs, expandable up to 64	\$ 1,280.00	\$ 1,280.00
29	AC-MER-CON-MR52	Series 3 Two-Reader Interface Module: mag or wiegand, 8 inputs, 6 relays (Mercury Part	\$ 705.00	\$ 20,445.00
4	AC-LSP-16DR-MER-LCK	Sixteen Door Mercury Dual Voltage Integrated	\$ 1,130.00	\$ 4,520.00
59	AC-HID-MCLASS-SE-PROX-OSDP- 920PTPTEK00387	Power System supporting one AC-MER-CONT- R40 Standard wall switch; HID Prox, AWID and EM4102 (32 bits); iCLASS Seos, SE, SR,	\$ 315.00	\$ 18,585.00

Subtotal	\$ 50,996.00
Total USD	\$ 50,996.00



Supplemental Data



SMART SECURITY SOLUTIONS FOR EDUCATION

Avigilon provides comprehensive video security and access control solutions that help you create a safe and secure environment and protect what is most valuable — your students, staff and faculty.

AI-POWERED VIDEO SECURITY

Avigilon Control Center (ACC) software provides an easy-to-use, AI-enabled user interface that brings the right information to you so that you can take action, helping ensure critical events do not go unnoticed.

POWERFUL SEARCH

Avigilon Appearance Search™ technology sorts through hours of video with ease to quickly locate a specific student, visitor or vehicle of interest across school grounds in near real-time.

USER-FRIENDLY DESIGN

User-friendly software is straightforward and intuitive, allowing your School Resource Officer to operate and manage the system, whether they are an IT novice or an expert.

EASY INTEGRATION AND COST SAVINGS

Our open platform security solutions allow for easy integration with your existing systems and technology, allowing you to expand your security solution with no overhaul required, and our video management system (VMS) works with both HD and analog cameras. Our cameras are compatible with a variety of VMS platforms and our access control solutions support open field hardware from other leading manufacturers.

EFFICIENT BANDWIDTH MANAGEMENT

Avigilon's High Definition Stream Management (HDSM) and HDSM SmartCodec™ technologies reduce bandwidth and storage needs while maintaining image quality, helping to keep internet connectivity costs down.



ORCHESTRATE

A simple, user-friendly and cloud-based workflow automation tool that gives you the ability to configure and automate workflows that control your integrated technology ecosystem.

AVIGILON CLOUD SERVICES

Manage multiple campuses from anywhere with convenient, centralized access to your system using a browser or our ACC Mobile app and remotely monitor the health of all your cloud-connected ACC sites to quickly assess maintenance activities.

H4 VIDEO INTERCOM

Combines a 3 MP wide dynamic range, low-light camera, with a high-performance intercom featuring noise reduction and echo-canceling technologies.

AI NVR

A purpose-built security-hardened NVR, with built-in server-side analytics that unlocks Avigilon's advanced AI capabilities for any connected video stream, including third party and non-analytic cameras.

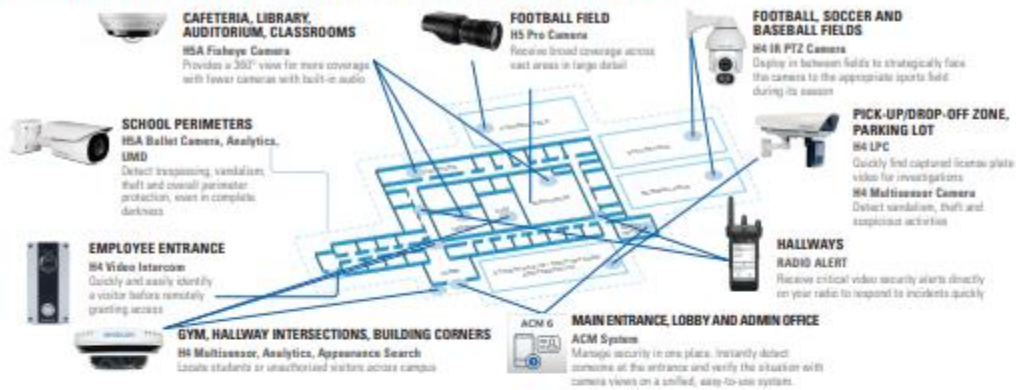
ACCESS CONTROL MANAGER (ACM)

ACM generated door events allow you to create rule-based actions and notifications for quick on-site responses, including immediate school-wide lockdown.





NEXT GENERATION SAFETY FOR THE NEXT GENERATION



COVID-19 RESPONSE SOLUTIONS FOR EDUCATION

NO FACE MASK DETECTION

Detects individuals who are in violation of face mask policies, prompting an automated alert through ACC™ video management software for quick, corrective action.

SOCIAL DISTANCING ANALYTICS

AI-powered analytics on Avigilon video security cameras can continuously monitor social distancing efforts within your school. Run a report of when social distancing violations occur, as well as recognize high violation zones and times requiring corrective measures.

OCCUPANCY COUNTING

Know how many students and staff members are inside a room at any given time, determine peak periods, and understand high traffic entry or exit points that require further attention.

ELEVATED TEMPERATURE DETECTION

Increase the efficiency of traditional physical screening efforts with a high-throughput and contactless method of pre-screening people at access points. The H4 Thermal Elevated Temperature Detection solution detects and notifies operators if individuals exhibit indications of elevated body temperature so that further evaluation may take place.

Avigilon, a Motorola Solutions company, designs, develops and manufactures solutions in video analytics, cloud, security cameras, video management software and hardware, and access control. Avigilon is an industry leader and, together with Motorola Solutions, provides integrated solutions for video security, access control and critical communications. Avigilon is proud to offer 24/7 technical support and complimentary software training.

FOR MORE INFORMATION,
ASKSALES@AVIGILON.COM

Visit: info.avigilon.com/education





CORONAVIRUS RESPONSE & RELIEF ACT EDUCATION STABILIZATION FUND

\$82 BILLION

FUNDS AVAILABLE

CONSIDER COMMUNICATIONS, SOFTWARE & VIDEO TECHNOLOGY SOLUTIONS

FUNDING HIGHLIGHTS

The Coronavirus Response & Relief Act provides a refresh of three CARES Act grant programs under the umbrella of the Education Stabilization Fund:

- Elementary and Secondary School Emergency Relief (ESSER II) Fund (\$54.3 billion)
- Higher Education Emergency Relief (HEER II) Fund (\$22.7 billion)
- Governor's Emergency Education Relief (GEER II) Fund (\$4.1 billion)

These grant programs are being administered through the U.S. Department of Education and are intended to support efforts by states, schools and institutions of higher learning to prevent, prepare for, and respond to coronavirus, but each has a different focus and are subject to different eligibility requirements.

WHO CAN APPLY

- ESSER Fund: State Education Agencies (SEAs) apply and must allocate at least 90% as subgrants to Local Education Agencies (LEAs), including school districts and charter schools
 - SEA allocations may be found [here](#).
- HEER Fund: Institutions of Higher Education (IHEs)
 - Public and nonprofit institution allocations may be found [here](#).
- GEER Fund: Governors apply and make subgrants to most significantly impacted LEAs and IHEs in the State
 - State allocations may be found [here](#).





ALLOWABLE USES OF FUNDS

ESSER II FUND:

- Any activity authorized by the Elementary and Secondary Education Act, the Individuals with Disabilities Education Act, and other education statutes.
- Coordination of preparedness and response efforts of local educational agencies with state, local, tribal, and territorial public health departments, and other relevant agencies, to improve coordinated responses among such entities to prevent, prepare for, and respond to coronavirus.
- Providing principals and other school leaders with the resources necessary to address the needs of their individual schools.
- Activities to address the unique needs of low-income children or students, children with disabilities, English learners, racial and ethnic minorities, students experiencing homelessness, and foster care youth, including how outreach and service delivery will meet the needs of each population.
- Developing and implementing procedures and systems to improve the preparedness and response efforts of local educational agencies.
- Training and professional development for staff of the local educational agency on sanitation and minimizing the spread of infectious diseases.
- Purchasing supplies to sanitize and clean the facilities of a local educational agency, including buildings operated by such agency.
- Planning for and coordinating during long-term closures, including for how to provide meals to eligible students, how to provide technology for online learning to all students, how to provide guidance for carrying out requirements under IDEA and how to ensure other educational services can continue to be provided consistent with all Federal, State, and local requirements.

HEER II FUND:

- Defray expenses associated with coronavirus (including lost revenue, reimbursement for expenses already incurred, technology costs associated with a transition to distance education, faculty and staff trainings, and payroll)
- At least 50% of the funding must go toward emergency financial aid grants to students for expenses related to disruption of campus operations related to coronavirus.

GEER II FUND:

- Provide emergency support through grants to local educational agencies and institutions of higher learning that are deemed to have been most significantly impacted by coronavirus to support their ability to continue to provide educational services and to support their on-going functionality.
- Provide support to any other institution of higher education, local educational agency, or education related entity within the State that the Governor deems essential for carrying out emergency educational services to students.

- Purchasing educational technology (including hardware, software, and connectivity) for students who are served by the local educational agency that aids in regular and substantive educational interaction between students and their classroom instructors, including low-income students and students with disabilities, which may include assistive technology or adaptive equipment.
- Providing mental health services and supports.
- Planning and implementing activities related to summer learning and supplemental afterschool programs, including providing classroom instruction or online learning during the summer months and addressing the needs of low-income students, students with disabilities, English learners, migrant students, students experiencing homelessness, and children in foster care.
- School facility repairs and improvements to enable operation of schools to reduce risk of virus transmission and exposure to environmental health hazards, and to support student health needs.
- Inspection, testing, maintenance, repair replacement, and upgrade projects to improve the indoor air quality in school facilities, including mechanical and non-mechanical heating, ventilation, and air conditioning systems, filtering, purification and other air cleaning, fans, control systems, and window and door repair and replacement.
- Other activities that are necessary to maintain the operation of and continuity of services in local educational agencies and continuing to employ existing staff of the local educational agency.

DEADLINES AND ADDITIONAL PROGRAM DETAILS

Consistent with Congressional intent to provide funding quickly and with minimal administrative burden, the Department of Education is awarding funds to eligible entities without the need to submit an application, except institutions of higher education that did not receive HEER funding under the CARES Act funding must submit an application for HEER II funding by April 15, 2021.

ESSER II funding must be awarded by SEAs within one year of receipt (i.e., by January 2022) and must be obligated by SEAs and subrecipients by September 30, 2023.

HEER II funding must be expended by institutions within one year from the date of their award.

GEER II funding must be awarded by governors within one year of receipt (i.e., by January 2022) and must be obligated by governors and subrecipients by September 30, 2023.

Further details and guidance on these programs:

[ESSER II](#)

[HEER II](#)

[GEER II](#)



CONSIDER SAFETY AND SECURITY SOLUTIONS TO ENSURE A SAFE AND HEALTHY ENVIRONMENT. FROM MOTOROLA SOLUTIONS FOR YOUR EDUCATION STABILIZATION FUND DOLLARS

DISTANCE LEARNING

Ensure every student can access online learning programs from the safety of their own homes with Nitro™, the Motorola Solutions private LTE solution. This functional and cost effective solution provides enterprise-grade private LTE as a wireless backhaul to your school's network. Combine the simplicity of an easy installation without miles of cables, and heavy maintenance work in each student's home, all with the added control of having complete ownership over your network.

SOCIAL DISTANCING TECHNOLOGY

Monitor social distancing violations automatically by measuring the distance between people so you can identify high-violation zones and times that require improvement.

OCCUPANCY COUNTING TECHNOLOGY

Monitor and manage occupancy rates by counting the number of students and staff members in a specific area of your campus, such as the library or gymnasium, to support social distancing.

NO FACE MASK DETECTION TECHNOLOGY

Automate the detection of students who are not wearing face masks with alarms to flag violations in real-time so you can take corrective measures.

CONTACT TRACING TECHNOLOGY

Physical access control helps with contact tracing to prevent contamination if an infected person is identified.

THERMAL TEMPERATURE SENSING CAMERAS

High-throughput, contactless alternative to traditional screening for elevated temperatures at entrances for preventative protection.

Learn more at www.motorolasolutions.com/education

Motorola Solutions offers a variety of solutions that can be deployed to help education agencies in their coronavirus response and mitigation efforts. You may be able to use your Education Stabilization Fund grant on these solutions, but you should consult your SEA and/or legal department if you have questions.



MOTOROLA SOLUTIONS

Motorola Solutions, Inc. 500 West Monroe Street, Chicago, IL 60661 U.S.A. motorolasolutions.com

MOTOROLA, MOTO, MOTOROLA SOLUTIONS and the Stylized M Logo are trademarks or registered trademarks of Motorola Trademark Holdings, LLC and are used under license. All other trademarks are the property of their respective owners. © 2021 Motorola Solutions, Inc. All rights reserved. 01-2021



Organizations such as the National Institute of Standards and Technology (NIST) are actively proposing an Identify-Protect-Detect-Respond-Recover framework for cyber security. The [NIST framework](#) advocates the identification of key business risks due to cyber threats, such as the protection of data, devices, and services; continuous monitoring to enable detection of cyber security events as they happen; and the development of a clear response and recovery process.

The Three Layers of Avigilon Cyber Protection

The protection of data, devices, and services can be successful only if the network-connected software and hardware implement appropriate defensive measures to ensure integrity, confidentiality, and availability.

Integrity | Ensuring data and the function of the system are not maliciously or inadvertently manipulated

The integrity of a system is compromised when the software is maliciously modified or taken over by an attacker who has learned an administrator-level password. Software defects that permit buffer overflow, database code injection, and cross-site scripting vulnerabilities can also cause a loss of integrity.

- | | | | |
|------------------|---|---|---|
| SOLUTIONS | • No backdoor administrative or maintenance access accounts | • Disabling access to OS | • SRP-TLS for client-server connections |
| | • Signed and encrypted firmware | • Fully encrypted control communication | • Automatic firmware updates |

Confidentiality | Keeping information private and secure

A system's confidentiality is compromised when users circumvent a system's access controls to gain unauthorized access to the data it contains. Most often, a breach in confidentiality is the result of an attacker guessing or obtaining a legitimate user's password to access the system.

- | | | | |
|------------------|--|--|---|
| SOLUTIONS | • Centralized user control through Active Directory integration and/or parent/child user sharing | • Password strength enforcement | • Lock-out on multiple invalid login attempts |
| | | • Ability to bulk-change camera passwords from Avigilon Control Center (ACC) | |

Availability | Ensuring system uptime and continuity of function

In addition to loss of confidentiality and integrity, the availability of a system and its data can be compromised by external attacks. These usually take the form of a denial of service (DoS) attack where an attacker bombards a system with requests. Although it is difficult to protect against all forms of these attacks, the effect is usually temporary.

- | | | | |
|------------------|---|--|--------------------------------|
| SOLUTIONS | • Progressive back-off on multiple invalid login attempts | • Separate limited access gateway for thin client (web and mobile) access to video | • 802.1x device authentication |
|------------------|---|--|--------------------------------|

*Please note that the advice and suggestions contained in this flyer are provided for informational purposes only and should not be construed or relied upon as comprehensive or exhaustive advice as to how to protect your systems from cyber vulnerabilities. Avigilon does not guarantee that any of its products are immune from a potential cyber attack and adhering to the advice and suggestions contained in this flyer may still result in your system being subject to cyber vulnerabilities or a cyber attack.

FOR MORE INFORMATION, VISIT AVIGILON.COM

AVIGILON™

© 2017 Avigilon Corporation. All rights reserved. AVIGILON, the AVIGILON logo, AVIGILON CONTROL CENTER, and ACC are trademarks of Avigilon Corporation. Other names or logos mentioned herein may be the trademarks of their respective owners.



Avigilon Access Control Manager™ 6 Virtual

Avigilon Access Control Manager Virtual is a physical access control system (PACS) that is VMware Ready™ for deployment in a virtual server environment, eliminating the need to maintain a separate, stand-alone server or dedicated network appliance. Access Control Manager Virtual is purpose-built for organizations that have migrated their IT infrastructure to a secure, private cloud environment, allowing them to maintain enterprise-grade physical security without the risk of storing sensitive information on a shared server hosted in a public cloud.



INTEGRATED ACCESS CONTROL VIRTUAL APPLIANCE

Avigilon Access Control Manager Virtual is a web-based, access control virtual appliance that leverages open architecture, integrates identity management and video surveillance to achieve a high level of scalability with a low cost of ownership.

PHYSICAL AND LOGICAL SECURITY CONVERGENCE

Avigilon Access Control Manager Virtual allows organizations to seamlessly integrate IT and physical security systems, such as Identity and Access Governance (IAG), Security Information and Event Management (SIEM), Physical Security Information Management (PSIM) and HR systems to correlate physical and logical security event information, monitor alarms and rapidly respond to unauthorized activities.

BENEFITS

- New Identity Correlation Report to track at risk identities that may have had contact with specific identities during a defined time frame.
- Video and alarm integration with the Avigilon Control Center (ACC) system
- Eliminate the cost of stand-alone servers and software
- Increase the efficiency and use of computer room resources
- Highly scalable design with decreased deployment time
- Helps reduce both capital and operational expenditures



SYSTEM RECOMMENDATIONS

VM System	VMware vSphere - v(7.0) VMware vSphere - v(6.5)
Processor	Intel® Xeon® E3-1270 v6 3.8GHz, 8M cache, 4C/8T, Turbo
Storage	1TB Solid State Drives
Memory	32 GB
Network	1 GB Ethernet Port
Max. Controllers	512
Card Readers	16 - 2,048
Max. Simultaneous Operators	50
Inputs	10,120
Outputs	10,120
Max. Identities	500,000
Max. Stored Events	150,000,000
Transactions (60 minutes sustained)	150,000

	Linux®
	OpenLDAP®
	VMware Ready
	SQL Server
	Oracle RDBMS
	Firefox
	Google Chrome™
	Apple Safari
	Internet Explorer
	Microsoft Edge

	HID® VertiX EVO™
	HID Global®
	HID pivCLASS®
	Mercury Security
	ASSA ABLOY
	Allegion
	Farpointe Data®
	EasyLobby® by HID
	LifeSafety Power®
	VIRDI
	Simons Voss

	Avigilon Control Center™
	Exocq Technologies by Tyco Security
	Milestone Systems

AC-SW-16R-VM-6-P	Access Control Virtual Appliance with 16 Readers
AC-SW-32R-VM-6-P	Access Control Virtual Appliance with 32 Readers
AC-SW-64R-VM-6-P	Access Control Virtual Appliance with 64 Readers
AC-SW-128R-VM-6-P	Access Control Virtual Appliance with 128 Readers
AC-SW-256R-VM-6-P	Access Control Virtual Appliance with 256 Readers
AC-SW-512R-VM-6-P	Access Control Virtual Appliance with 512 Readers
AC-SW-1024R-VM-6-P	Access Control Virtual Appliance with 1024 Readers
AC-SW-2048R-VM-6-P	Access Control Virtual Appliance with 2048 Readers
AC-SW-16RCU-6-P	16 Reader software add-on



Avigilon Access Control Manager™ 6 Enterprise and Enterprise Plus Systems

The Access Control Manager (ACM) system is an IT-friendly Physical Access Control System (PACS) from Avigilon for enterprise-class installations. It's a complete access solution that is designed to keep your focus on securing your people, property and assets, and maximizing your time by helping you respond immediately to alerts wherever you are. The ACM™ system is a browser-based solution that can integrate with existing IT/HR systems, minimizing the need for duplicate data entry. It comes with a full set of standard features that not only help to maximize your time, but will reliably safeguard your information.



INTEGRATED ACCESS CONTROL NETWORK APPLIANCE

Avigilon's Access Control Manager Enterprise and Enterprise Plus systems are integrated access control network appliances that leverage an open architecture, integrate identity management and video surveillance and achieve a high level of scalability with a low cost of ownership by eliminating the need to maintain a stand-alone server or install software on multiple machines.

BENEFITS

- New Identity Correlation Report to track at risk identities that may have had contact with specific identities during a defined time frame.
- Powerful 1U rack mount chassis with pre-installed software from Avigilon
- Scalable from one access door to thousands of doors per Enterprise appliance
- Automatically synchronizes security data across all Enterprise/Enterprise Plus appliances in real-time
- Auto-failover capability enables seamless redundancy to keep critical security data safe
- Leverages open field hardware investments

ENTERPRISE PLUS BENEFITS

- Provides up to 1.3 TB of effective storage capacity in a RAID 5 solid state drive configuration
- Offers 32GB of expanded memory for faster delivery of information in high demand environments
- Delivers high availability with redundant 350W power supplies
- Hot-swappable components enable uninterrupted operation of the system even if the power supply and solid state drive (SSD) need replacement.



Specifications

		ENTERPRISE			ENTERPRISE PLUS		
SYSTEM	Card Readers	16 - 400			256 - 2048		
	Inputs	5,060			10,120		
	Outputs	5,060			10,120		
	Hard Disk Drive Configuration	1TB 72K RPM SATA 6Gbps 3.5in Cabled Hard Drive			4 x 480GB Solid State Drives, RAID5, 1.3TB effective storage		
	Processor	Intel® Xeon® E-2124 3.3GHz, 8M cache, 4C/4T, turbo (78W)			Intel Xeon E3-1270 v6 3.8GHz, 8M cache, 4C/8T, Turbo (72W)		
	Memory	1-8GB 2666MT/s DDR4 ECC UDIMM			32 GB (2 x 16GB), 2400MT/s DDR4 DIMMs, UDIMMs		
	Network Adapter Card	2 x 10/100/1000 Mbps Network Interface Controller (NIC) ports			2 x 10/100/1000 Mbps NIC ports		
	Remote Management	iDRAC9 Basic			iDRAC 9 Enterprise		
	Max. Controllers	512			512		
	Max. Simultaneous Operators	20			50		
	Max. Identities	250,000			500,000		
	Transactions (60 minutes sustained)	50,000			150,000		
	Max. Stored Events	150,000,000			150,000,000		
MECHANICAL	Form Factor	1U rack-mount chassis			1U rack-mount chassis		
	Dimensions (HxWxD)	42.8 mm x 482.4 mm x 676.92 mm; 1.68" x 18.99" x 26.65"			42.8 mm x 482.4 mm x 677.3 mm; 1.68" x 18.99" x 26.66"		
	Weight	8.77 kg (19.32 lbs)			13.4 kg (29.54lb)		
	Cable Management	1U/2U Static Rails for 2-Post and 4-Post Racks			Dell ReadyRails Sliding Rails With Cable Management Arm		
ELECTRICAL	Power Input	90 to 264 VAC, 47-63 Hz			90 to 264 VAC, 47-63 Hz		
	Power Supply	Single non-redundant			Power supply redundancy: dual 350W Hot Plug		
	Power Consumption	250 W			350W		
ENVIRONMENTAL	Operating Temperature	10° C to 35° C (50° F to 95° F)					
	Storage Temperature	-40° C to 65° C (-40° F to 149° F)					
	Operating Humidity	10 - 80% Relative humidity (non-condensing)					
	Storage Humidity	5 - 95% Relative humidity (non-condensing)					
	Operating Vibration	0.26G _{rms} at 5-350Hz for 15 minutes					
	Storage Vibration	1.88G _{rms} at 10-500Hz for 15 minutes					
	Operating Shock	Six consecutively executed shock pulses in the positive and negative x, y, and z axis of 6 G for up to 11 ms.					
	Storage Shock	Six consecutively executed shock pulses in the positive and negative x, y, and z axis (one pulse on each side of the system) of 71 G for up to 2 ms.					
	Operating Altitude	-15.2 m (-50 ft) to 3048 m (10,000 ft)					
	Storage Altitude	-15.2 m (-50 ft) to 12,000 m (39,370 ft)					
CERTIFICATIONS	ACMA/C-Tick	BELLIS	BSMI	CE	CNCA/CCC	EAC	
	FCC	ICES	IECEE CB	INSM	KCC	KEBS	
	KSA ICCP	KUCAS	KVALITET	NEMKO	NRCS	NRTL	
	NYCE/NOM	OTAN-CKT	SABS	SCC	SII	SONCAP	
	STZ	TUV	UKRTEST/UKRSERT/COMPUTER		VCCI		
SUPPORTED IT PLATFORMS	Linux®	Google Chrome™	SUPPORTED ACCESS CONTROL SOLUTIONS	HDI® VeriX EVO™	Mercury Security	SUPPORTED VIDEO INTEGRATION SOLUTIONS	Avigilon Control Center™ Exacq Technologies by Tyco Security Milestone Systems
	OpenLDAP®	Apple Safari		HDI Global®	VRDI		
	VMware Ready™	Internet Explorer		HDI pivCLASS®	Elmdene		
	Firefox	Microsoft Edge		ASSA ABLOY	SimonsVoss		
				Allegion	EasyLobby® by HDI		
				Firepointe Data®	LifeSafety Power		
ORDERING INFORMATION	AC-APP-16R-ENT2-6		Access Control Enterprise Appliance with 16 readers (can be upgraded to 400 readers)				
	AC-APP-32R-ENT2-6		Access Control Enterprise Appliance with 32 readers (can be upgraded to 400 readers)				
	AC-APP-64R-ENT2-6		Access Control Enterprise Appliance with 64 readers (can be upgraded to 400 readers)				
	AC-APP-128R-ENT2-6		Access Control Enterprise Appliance with 128 readers (can be upgraded to 400 readers)				
	AC-APP-256R-ENT2-6		Access Control Enterprise Appliance with 256 readers (can be upgraded to 400 readers)				
	AC-APP-ENT2-WARR-EXTEND-1YR		1 Year Extended Warranty for Access Control Manager Enterprise Appliance				
	AC-APP-ENT2-WARR-EXTEND-2YR		2 Year Extended Warranty for Access Control Manager Enterprise Appliance				
	AC-APP-16R-ENT-Plus-6		Access Control Enterprise Plus Appliance with 16 readers (can be upgraded to 2048 readers)				
	AC-APP-256R-ENT-Plus-6		Access Control Enterprise Plus Appliance with 256 readers (can be upgraded to 2048 readers)				
	AC-APP-512R-ENT-Plus-6		Access Control Enterprise Plus Appliance with 512 readers (can be upgraded to 2048 readers)				
	AC-APP-1024R-ENT-Plus-6		Access Control Enterprise Plus Appliance with 1024 readers (can be upgraded to 2048 readers)				
	AC-APP-2048R-ENT-Plus-6		Access Control Enterprise Plus Appliance with 2048 readers				
	AC-APP-ENT-PLUS-WARR-EXTEND-1YR		1 Year Extended Warranty for Access Control Manager Enterprise Plus Appliance				
	AC-APP-ENT-PLUS-WARR-EXTEND-2YR		2 Year Extended Warranty for Access Control Manager Enterprise Plus Appliance				

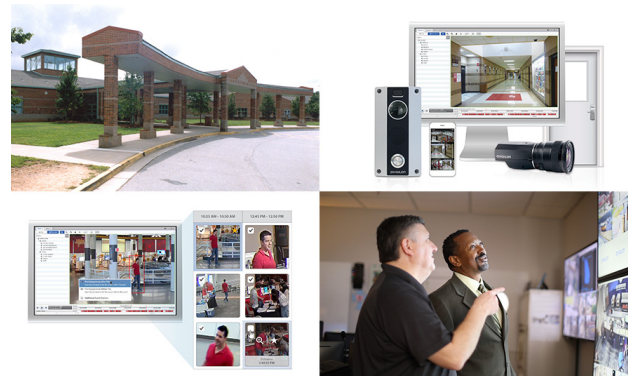
Secure Your School Education

Many schools lack adequate surveillance or access control systems to safely monitor campus activity and manage the entry and exit of students, visitors, and staff. Complement school safety plans with state-of-the-art security systems to improve the safety of students and effectiveness of security resource officers. Reduce risks associated to school environments with abilities to electronically lockdown all campus doors in an emergency situation.

Blue Violet Networks designs and installs flexible, reliable and scalable solutions. From classrooms to residence halls, our complete access control systems and integrated video surveillance will help keep students and property safe. Security systems shouldn't take a semester to deploy. Our highly-trained certified engineers will have you up and running in no time. We collaborate with you to design a new system or upgrade your current one to create a comprehensive solution that meets all requirements. Your team is trained on how to use and maintain the system — with no questions left unanswered.

- ✓ We helped improve student safety with video surveillance at **Irvine Unified School District (43 schools, 700 cameras)**, decreased theft and vandalism, and established real-time viewing at Irvine Police Station for better quality video of Irvine school grounds.
- ✓ We magnified access control for **Irvine Valley College (\$6M investment)** to eliminate the human factor where someone has to lock and unlock doors with electrified global classroom lockdowns.

SECURITY PRODUCTS AND SERVICES AVAILABLE UNDER CMAS PROGRAM



- **AVIGILON** Video Surveillance
- **AVIGILON** Access Control System
- **SCHLAGE** Electrified Door Entry Locks
- **VON DUPRIN** Sophisticated Door Exit
- **STEELCRAFT** Doors and Installation
- **Security** - IT Hardware
- **Design** - Consulting, ADA



SIMPLIFIED PROCUREMENT

Under the California Multiple Awards Schedule (CMAS) program educational institutions have the convenience to purchase technology products and services through an expedited and simplified procedure, at a significant cost savings which have been pre-negotiated and assessed to be fair, reasonable and competitive.

Blue Violet Networks is an authorized provider of video surveillance and access control products and services under the CMAS program where it provides schools with industry leading solutions without going through the tedious bid process. Our CMAS designation is designed to serve you by:

- ✓ Simplifying the Procurement Process
- ✓ Reducing Costs while Saving Time and Money
- ✓ Expediting the Purchase of Products and Services
- ✓ Allowing UC and CSU institutions, K-12 schools and community colleges to acquire the technology and services needed to serve the people of California.



- **CMAS Contract:** 3-16-84-0052B
- **Base GSA Schedule:** GS-07F-9671S
- **CMAS Contract:** 4-16-84-0053A
- **Base GSA Schedule:** GS-07F-0326T
- **California Sellers Permit:** 10254983
- **Small Business Certification:** 2002871

Standing side-by-side with our customers since 1979. Our strengths reside in exceeding expectations by providing innovative solutions for K-12 schools and colleges, nationwide enterprises and government entities. As an award-winning integrator, we offer secure simple-to-use security systems with a sophisticated IT-friendly, end-to-end solution that will grow with any organization.



ESSENTIAL EXPERIENCE YOU CAN COUNT ON

Our undying passion for IP-based technologies earned us numerous accolades for deployed telephony, data infrastructures, and physical security. We offer proven results recognized by security industry leaders. The secret to our success lives in creative solutions used to protect people and schools. Some of the largest organizations in the U.S. have trusted us to integrate and service its security systems allowing us to give you an essential toolbox of expertise, technologies, and solutions for a flawless deployment.

RELENTLESS DEDICATION TO OUR CUSTOMERS

Our mission is to set the standard for service in our industry with over-the-top assistance for every customer 24/7/365. A history built on a legacy of long-term customer relationships lasting over four decades was founded in our relentless commitment to support and streamlined operations. Decisions can be made quickly along with same-day service. Customers get invaluable experience on their side since our custom solutions are the end result of hundreds of well-designed and strategically implemented systems. As a customer, you will work with a certified team of engineers who offer deep insight of converged complex technologies for a reliable easy-to-use solution — consider us an extension of your security and IT staff.

DIFFERENTIATORS

- ✓ #1 Avigilon / Motorola Dealer in Southern California, since 2013
- ✓ Authorized CMAS Reseller of Video Surveillance, Access Control, and Locking Hardware
- ✓ Dedicated to Helping Customers Improve Security and Protect its People and Campuses
- ✓ Delivering Large-Firm Capabilities with the Personal Attention of a Small Company
- ✓ Honored at International Security Conference (ISCWest) Three Years in a Row
- ✓ Offering the Largest Team of Avigilon Certified Enterprise Engineers & Support Staff in California

MORE THAN
40 YEARS
STRONG



Headquartered in California with nationwide reach. In choosing to deploy your system with us, your organization will join a rapidly growing group of Southern California based educational and governmental institutions using our security integrations and service. You will have a single point of contact for sales and service from our local offices.

TECHNOLOGY PARTNER AVIGILON/MOTOROLA

Avigilon Corporation designs, develops, and manufactures video analytics, network video management software and hardware, surveillance cameras, and access control solutions for the global market. Blue Violet Networks—a leading Avigilon Certified Enterprise Partner in the region — installs high quality video within a user-friendly interface paired with powerful management and analytics tools that minimizes training for your security staff. Our technicians proficiently install Avigilon products, while staying true to the manufacturer warranties that come with the equipment, including priority service from the manufacturer.

- ✓ Complete Surveillance, Simplified Access Control and Self-Learning Video Analytics
- ✓ Superior HD Cameras for Video Surveillance with Resolutions from 1 to 30 Megapixels (MP), Including the Security Industry's First Single-Sensor 7K (30 MP) Camera
- ✓ Storage Management & Data Projection with Scalable and Reliable Recording Platforms
- ✓ Open Video Management Software that Integrates with Avigilon and Third-Party IP Cameras

OUR CUSTOMERS

Adelanto School District

ADELANTO SCHOOL DISTRICT

20 Locations | 1000 Users
Customer since 2009



BALDWIN PARK UNIFIED SCHOOL DISTRICT

24 Locations | 1,000 users



CHINO VALLEY USD

23 Locations | 3000 Users
Customer since 1999



FULLERTON SCHOOL DISTRICT

Customer since 2016



HACIENDA LA PUENTE UNIFIED SCHOOL DISTRICT

Customer since 2014



IRVINE USD

Customer since 2014



MORENO VALLEY USD

3500 Users | 37 Schools
Customer since 1990



OAK PARK UNIFIED

Customer since 2013



PALO VERDE UNIFIED SCHOOL DISTRICT

Customer since 2016



SAN DIEGO USD

District Office
Customer since 2000



TUSTIN USD

Customer since 2018



HUNTINGTON BEACH USD

Customer since 2019



MENIFEE USD

Customer since 2019



ETIWANDA USD

Customer since 2019



BIOLA UNIVERSITY

Customer since 2014

CAL POLY POMONA

CAL POLY POMONA

Various Projects
Customer since 2013



CENTRALIA SCHOOL DISTRICT

Customer since 2020



CSU LOS ANGELES

Customer since 2015



LA SIERRA UNIVERSITY

Customer since 2011



MT. SAN JACINTO COLLEGE

Customer since 2013



MOUNT ST. MARY'S

1700 Phones
Customer since 2012



ORANGE COAST COLLEGE

Customer since 2015



UNIVERSITY OF CALIFORNIA, IRVINE

Customer since 2011



SAGE HILL SCHOOL

Customer since 2018



IRVINE VALLEY COLLEGE

Customer since 2018



CREAN LUTHERAN HIGH

Customer since 2018



CITY OF LAGUNA NIGUEL

City, Sheriff
Customer since 1992



CITY OF DOWNEY

City, Police, Fire
Customer since 2014



CITY OF LAKE FOREST

Customer since 2014



CITY OF LA HABRA

City, Police
Customer since 2013



CITY OF LA PUENTE

Customer since 2013



CITY OF MURRIETA

City, Police, Fire
Customer since 2014



CITY OF HEMET

350 Users
Customer since 1999



CITY OF RIALTO

Customer since 2013



CITY OF SAN FERNANDO

Customer since 2014



DANA POINT HARBOR

Customer since 2012



NATIONAL CITY

City, Police



CITY OF WHITTIER

Customer since 2018



CITY OF WESTMINSTER

Customer since 2019



SEGERSTROM CENTER FOR THE ARTS

Customer since 2020



CALIFORNIA SCIENCE CENTER

Customer since 2020



COUNTY OF ORANGE

Various locations



COUNTY OF RIVERSIDE

Customer since 2013



SIERRA CONSERVATION

Customer since 2014



STATE OF CALIFORNIA

Customer since 2014



ORANGE COUNTY PROBATION

Customer since 2015



FLORIDA DEPARTMENT OF TRANSPORTATION

Customer since 2014



SAN DIEGO METROPOLITAN TRANSPORTATION SYSTEM

Customer since 2012

CUSTOMERS CONT'D



**REPUBLIC NATIONAL
DISTRIBUTING COMPANY**
Nationwide
Customer since 2014



**SOUTHERN GLAZER'S
WINE & SPIRITS**
30 Offices | CA & NV
Customer since 1987



3 DAY BLINDS
30 Offices | CA & NV
Customer since 1987



STEELSCAPE
Locations: CA, WA
Customer since 2016



BIO-RAD LABORATORIES
3 Corporate Offices
Customer since 2008



99¢ ONLY STORES
3 Corporate Offices
Customer since 2012



GOODWILL INDUSTRIES
Corporate Offices | 20 Locations
Customer since 2017



**FARMERS INSURANCE GRP
FEDERAL CREDIT UNION**
12 Locations
Customer since 2011



**HOULIHAN LOKEY
INVESTMENT BANKING**
Nationwide
Customer since 1995



**PACIFIC MARINE
CREDIT UNION**
Customer since 2015



ST. MARY MEDICAL CENTER
Customer since 2016



**SOUTHERN CALIFORNIA
EDISON CREDIT UNION**
Multiple locations
Customer since 2014



U.S. BANK
Customer since 2016



BALBOA CAPITAL
Customer since 2017



NATIONWIDE LEGAL
Customer since 2017



MS&K LAW
Locations: CA, NY, DC
Customer since 2014



**METTLER-TOLEDO
INTERNATIONAL**
Customer since 2014



GRIFFITH COMPANY
Customer since 2005



SASCO
Corporate Office
Customer since 2015



EPSON AMERICA
Corporate Offices
Customer since 2000



FARMER BROTHERS
Corporate Office
Customer since 2013



ELEMENT MATERIALS
Locations: 25 in U.S.A.,
2 in Europe
Customer since 2000



**LOS ANGELES
FREIGHTLINER**
CA, NV, AZ
Customer since 2014



**RITCHIE BROS.
AUCTIONEERS** Nationwide
Customer since 2015



TOM'S TRUCK CENTER
5 Locations
Customer since 2015



CONTRACTORS WARDROBE
Customer since 2019



THE QUEEN MARY
Customer since 2019



**COURTYARD BY
MARRIOTT**
Customer since 2019



**AZOFF MUSIC
MANAGEMENT**
Customer since 2009



DIGITAL DOMAIN FILMS
750 Users in U.S./Canada
Customer since 1999



LMNO PRODUCTIONS
Corporate Offices
Customer since 2009



GOLDEN ACORN CASINO
Customer since 2017



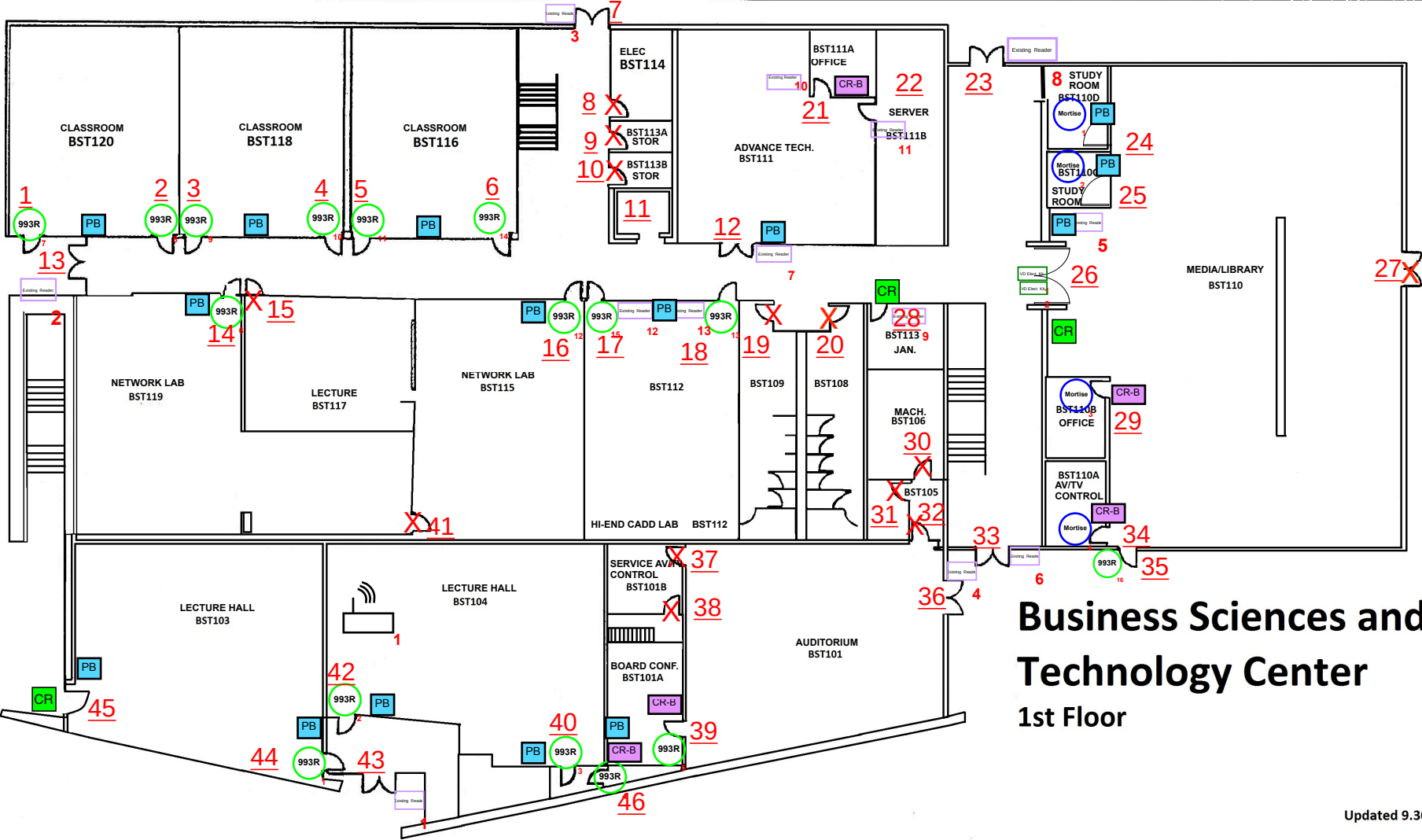
PALA CASINO
2500 Users
Customer since 2009

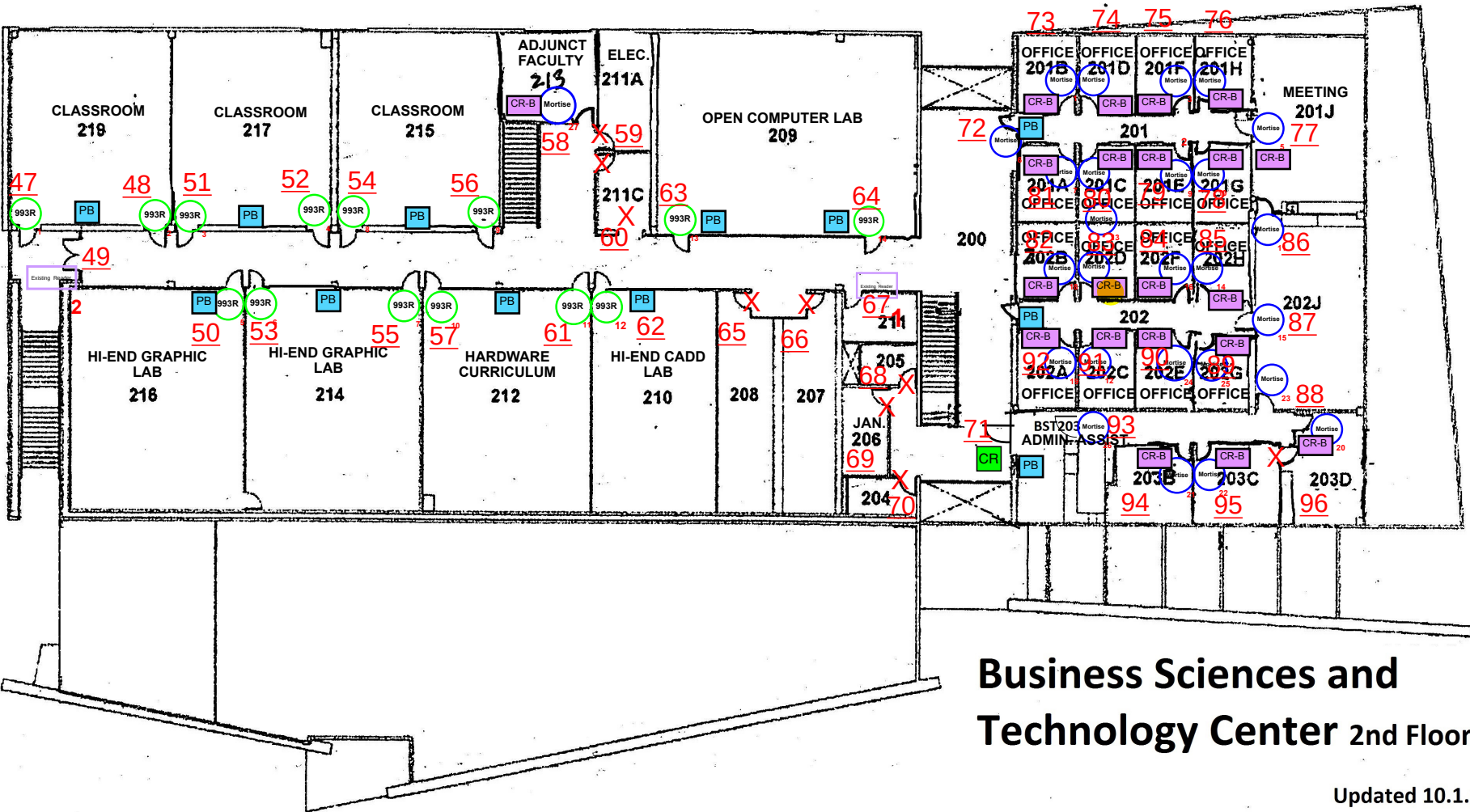


BEVERLY CENTER
Customer since 2015



SOUTH COAST PLAZA
Customer since 2012







Quote

Date: 8/5/2020
Expiration Date: 9/20/2020

To: Irvine Valley College
Anna Petrossian
5500 Irvine Center Dr.
Irvine CA 92618

Salesperson	Job Location or Description	Delivery Date	Payment Terms
Rob Clement	BSTIC - Access Control - Phase 1	TBD	NET 30

CMAS Contracts 3-17-84-0052B and 4-16-84-0053A were used for pricing below
NSP= Not Specifically Priced Items

Qty	Manufacturer	Part Number	Description	MSRP	CMAS Unit Price	CMAS Ext Cost
Locking Hardware						
30.00	AVIGILON	AC-SCH-AD300MS50SiRHO626RD	AD300 networked hardwired Mortise	\$ 2,517.00	\$ 2,038.77	\$ 61,163.10
31.00	AVIGILON	AC-SCH-AD300993R70SiRHO626RD	AD300 networked hardwired 993R exit trim rim	\$ 2,568.00	\$ 1,966.43	\$ 60,959.33
12.00	AVIGILON	AC-HID-READ-ICLASS-SE-RP40	iCLASS SE RP40 Contactless Smart Card Reader, Wall Switch, STD Proxy	\$ 245.00	\$ 187.61	\$ 2,251.32
12.00	AVIGILON	AC-COMPOSITE-PLN-33M-ASSEMBLY	Composite - Card Reader Plenum 33M Cable Assembly	\$ 250.00	\$ 176.00	\$ 2,112.00
61.00	AVIGILON	AC-485-33M-ASSEMBLY	485 Serial 33M Cable Assembly	\$ 90.43	\$ 72.34	\$ 4,412.98
Licenses, Controllers and Power Supplies.						
5.00	AVIGILON	AC-SW-16RCU	ACM Licenses (16 Reader Count Software License)	\$ 833.00	\$ 637.86	\$ 3,189.30
4.00	AVIGILON	AC-MER-CON-MR52	2-Reader Interface Module - (2 reader: mag or wiegand, 8 inputs, 6 relays) (Mercury MR52)	\$ 685.00	\$ 524.53	\$ 2,098.12
2.00	AVIGILON	AC-MER-CONT-2DR	Controller, 16MB RAM, Ethernet, 8In/4Out/2Rdr	\$ 1,155.00	\$ 949.52	\$ 1,899.04
11.00	AVIGILON	AC-MER-CONT-1DR	Controller, Single Door, 16MB RAM, w/PoE, 2In/2Out/2Rdr	\$ 595.00	\$ 503.39	\$ 5,537.29
2.00	AVIGILON	AC-MER-CON-MR16IN	16 Zone Input Monitor Module (with 2 relays) (Mercury MR16IN)	\$ 717.00	\$ 593.45	\$ 1,186.90
2.00	AVIGILON	AC-MER-CON-MR16OUT	16 Relay Output Control Module (Mercury MR16OUT)	\$ 717.00	\$ 593.45	\$ 1,186.90
4.00	AVIGILON	AC-LSP-16DR-MER-LCK	Sixteen Door Mercury Dual Voltage Integrated Power System	\$ 1,110.00	\$ 849.97	\$ 3,399.88
16.00	AVIGILON	AC-BACKUP-BATT-12V-12AH	Backup Battery, 12VDC, 12AH	\$ 110.00	\$ 84.32	\$ 1,349.12
Hinges						
60.00	ALLEGIONS	Hinges 3CB1 4 1/2 x 4 1/2 TW4 626	4.5x4.5 3K Elec Hinge	\$ 432.60	\$ 302.82	\$ 18,169.20
8.00	ALLEGIONS	K-DLA 1/4" x 18"	18 inch loop hing	\$ 37.67	\$ 26.37	\$ 210.95
10.00	ALLEGIONS	Electric Pivot EM19 4-WIRE LH/RH 626	Pivot Hinge	\$ 619.00	\$ 433.30	\$ 4,333.00
Closers						
2.00	ALLEGIONS	4040 XP REG/PA TBSRT AL	Closer 4040 XP REG/PA TBSRT AL	\$ 525.00	\$ 367.50	\$ 735.00
1.00	ALLEGIONS	2033 STD LH AL	Closer 2033 STD LH AL	\$ 1,130.00	\$ 770.00	\$ 770.00
9.00	ALLEGIONS	2031 STD LH AL	Closer 2031 STD LH AL	\$ 1,130.00	\$ 770.00	\$ 6,930.00

			Exit Devices			
2.00	ALLEGIONS	Exit Device AX EL PA 3549A-NL-OP x 388 9'0" DR. US26D	Concealed Vertical Rod Panic with Trim (9 foot rods)	\$ 3,909.00	\$ 2,736.30	\$ 5,472.60
2.00	ALLEGIONS	Exit Device AX EL PA 3549A-EO 9'0" DR. US26D	Concealed Vertical Rod Panic without Trim (9 foot rods)	\$ 3,598.00	\$ 2,518.60	\$ 5,037.20
2.00	ALLEGIONS	Power Supply PS914 900-2RS	Power supply	\$ 922.00	\$ 645.40	\$ 1,290.80
3.00	ALLEGIONS	Exit Device AX EL PA 3549A-NL-OP x 388 US26D	Concealed Vertical Rod Panic with (8 foot rods)	\$ 3,909.00	\$ 2,736.30	\$ 8,208.90
4.00	ALLEGIONS	Exit Device AX LD PA 98EO US26D	Rim Panic for AD300 no "F" option	\$ 1,522.00	\$ 1,065.40	\$ 4,261.60
4.00	ALLEGIONS	Exit Device AX EL PA 3549A-NL-OP x 388 10'0" DR. US26D	Concealed Vertical Rod Panic with Trim (10 foot rods)	\$ 3,909.00	\$ 2,736.30	\$ 10,945.20
4.00	ALLEGIONS	Exit Device AX EL PA 3549A-EO 10'0" DR. US26D	Concealed Vertical Rod Panic without Trim (10 foot rods)	\$ 3,598.00	\$ 2,518.60	\$ 10,074.40
9.00	ALLEGIONS	SCH 20-079	RIM Housing	\$ 64.00	\$ 44.80	\$ 403.20
1.00	ALLEGIONS	Fire Exit Device AX EL PA 9827NL-F x 990NL-R&V	98 Series EL Surface Vertical Panic with Trim	\$ 3,704.00	\$ 2,592.80	\$ 2,592.80
1.00	ALLEGIONS	Exit Device AX EL PA 3549A-EO US26D	EL Concealed Vertical Rod Panic no Trim	\$ 3,598.00	\$ 2,518.60	\$ 2,518.60
27.00	AVIGILON	AX PA 98EO-F US26D	Exit Device	\$ 1,684.00	\$ 1,178.80	\$ 31,827.60
			Auto Openers			
1.00	ALLEGIONS	9553 REG	Door Operator (Dual Opener)	\$ 8,100.00	\$ 5,670.00	\$ 5,670.00
			Door Contacts			
16.00	ALLEGIONS	1078C	Door Contact - Recessed	\$ 48.23	\$ 42.28	\$ 676.48
16.00	AVIGILON	AC-485-33M-ASSEMBLY	485 Serial 33M Cable Assembly	\$ 90.43	\$ 72.34	\$ 1,157.50
			ADA - Actuator			
8.00	ALLEGIONS	Actuator 8310-836TW	Actuator	\$ 1,147.00	\$ 802.90	\$ 6,423.20
			Panic Stopper Buttons			
27.00	AVIGILON	AC-SS2489NT-EN	Stopper Stations-Panic Button - Customized.	\$ 217.00	\$ 193.39	\$ 5,221.53
27.00	AVIGILON	AC-485-33M-ASSEMBLY	485 Serial 33M Cable Assembly	\$ 90.43	\$ 72.34	\$ 1,953.29
			Miscellaneous			
2.00	ALLEGIONS	Offset Door Pull 1157 630	Handles	\$ 129.80	\$ 116.82	\$ 233.64
3.00	ALLEGIONS	Blank Strike BS-161 630	Strike Plate for Mortise panic to Rim Panic conversion	\$ 8.30	\$ 7.47	\$ 22.41
3.00	ALLEGIONS	Filler Plate EF-86 PC	Filler Plate for Mortise panic to Rim Panic conversion	\$ 4.50	\$ 4.05	\$ 12.15
1.00	NSP	M/Conduit	Electrical for New Auto Openers, Conduit, Boxes and Enclosures	\$ 3,890.00	\$ 3,501.00	\$ 3,501.00
63.00	ALLEGIONS	FR/CRT	Recertification - Fire	\$ 250.00	\$ 238.69	\$ 15,037.47

Product	\$	304,435.01
Tax 7.75%	\$	23,593.71
Labor	\$	152,217.50
Shipping	\$	4,566.53
Bond	\$	14,544.38
Total	\$	499,357.13



Northwood High School



blueviolet
NETWORKS

Quote

Date: 8/19/2019

Expiration Date: 9/18/2019

To: Campus Security - Irvine USD
(Attn: Don Grudem)
4861 Michaelson Drive
Irvine, CA 92612
949-936-5350

Salesperson	Job Location or Description	Payment Terms
Rob Clement	Northwood H.S. - 2019 Perimeter Cameras with P2P Link	Net 30

Scope of Work

CMAS Contract 3-16-84-0052A and 3-17-84-0052B was used for product pricing.

Lifts, Cabling, Conduit and PoE switches to be provided by District unless other wise included below.

Qty	Manufacturer	Part Number	Description	MSRP	Unit Price	Qty Total
			Licenses			
1	AVIGILON	1C-ACC6-ENT	ACC 6 Enterprise license for up to 1 camera channels	\$ 335.00	\$ 249.77	\$ 249.77
			Multi Sensor Cameras - 4X8 360° Note Conduit, NEMA and Power to be provided by IUSD			
1.00	AVIGILON	32C-H4A-4MH-360	4 x 8 MP, WDR, LightCatcher 4mm, Camera Only	\$ 2,400.00	\$ 1,837.78	\$ 1,837.78
1.00	AVIGILON	H4AMH-AD-PEND1	Outdoor pendant mount adapter, must order of IRPTZ-MNT-WALL1 or IRPTZ-MNT-NPTA1 and one of H4AMH-DO-COVER1 or H4AMH-DO-COVER1-SMOKE.	\$ 200.00	\$ 153.15	\$ 153.15
1.00	AVIGILON	IRPTZ-MNT-WALL1	Pendant wall arm adapter, for use with H4AMH-AD-PEND1 or H4IRPTZ	\$ 130.00	\$ 99.55	\$ 99.55
1.00	AVIGILON	H4-MT-POLE1	Pole mount adapter for use with H4A-MT-WALL1, H4-BO-JBOX1, H4SL, H4F and H4 PTZ cameras.	\$ 90.00	\$ 68.92	\$ 68.92
1.00	AVIGILON	H4AMH-DO-COVR1	Dome bubble and cover, for outdoor surface mount or pendant mount, clear	\$ 120.00	\$ 91.89	\$ 91.89
1.00	AVIGILON	H4AMH-AD-IRIL1	The optional IR illuminator ring, up to 30m (100ft), for use with may be used when the H4AMH-DO-COVER1.	\$ 330.00	\$ 252.70	\$ 252.70
1.00	AVIGILON	POE-INJ2-60W-NA	Single port Gigabit PoE++ 60W, NA power cord	\$ 150.00	\$ 114.86	\$ 114.86
			P2P Wireless Connection -			
1.00	NSP	MH-B100-CCS-PoE-MWB	MultiHaul™ BU, 90°, 500Mbps upgradable to 1800Mbps, 2 RJ-45 & 1 SFP (1 port PSE enabled), MK & PoE injector included, IP-65, White	\$ 1,592.00	\$ 1,592.00	\$ 1,592.00
1.00	NSP	MH-T200-CNN-PoE-MWB	MultiHaul™ TU, 90°, base rate 100Mbps upgradable to 1000Mbps, 1 RJ-45 port, MK & PoE injector included, IP-65, White	\$ 632.00	\$ 632.00	\$ 632.00
1.00	NSP	SR-AR-5Y-MH-B	SikluCare "Gold" Service&Support Plan - Advance Replacement - 5 Years. Including Extended Warranty cost.	\$ 557.00	\$ 557.00	\$ 557.00
1.00	NSP	SR-AR-5Y-MH-T	SikluCare "Gold" Service&Support Plan - Advance Replacement - 5 Years. Including Extended Warranty cost.	\$ 263.00	\$ 263.00	\$ 263.00
			Miscellaneous Product			
1	NSP	BVN	Cabling Supplies and Mounting Hardware	\$ 400.00	\$ 400.00	\$ 400.00

			SIN 246-1000 Ancillary Services			
32	SIN 246-1001	Tech-2 Technician Level 2	Labor rate for Lead Technician/Supervisor for project installation.	\$ 80.60	\$ 2,579.20	\$ 2,579.20
1	SIN 246-1002	Tech-3 Technician Level 3	Labor rate for IT Network Technician, software and hardware diagnostics, system commissioning and validation.	\$ 82.62	\$ 82.62	\$ 82.62
4	SIN 246-1003	PM-1 Project Manager	Labor rate for Project Manager.	\$ 91.69	\$ 366.76	\$ 366.76
1	SIN 246-1004	DET-1 Design, Engineering & Training	Labor rate for complex system design, engineering and analysis; system modifications and end user training.	\$ 97.73	\$ 97.73	\$ 97.73

This is a quotation on the goods named, subject to the conditions below

* Software has no annual fees.

This quote comes with a standard 1 year maintenance and service

Blue Violet Networks Technical Service Team will assist with further instructions upon request.

Subtotal	\$ 6,312.62
Sales Tax @ 7.75%	\$ 489.23
Installation	\$ 3,126.31
Shipping	\$ 78.93
Total	\$ 10,007.09