



101W. Hillside Rd., Ste 11B
 Laredo, TX 78041
 (956)712-8249 Office (956)712-4436 Fax

Estimate

Number: E2585

Date: 10/17/2014

Bill To:

Webb County Road and Bridge
 HWY 59
 Laredo, TX, 78041

Ship To:

Terms	Customer #	Service Rep.	Project
IP and Analog			

Description	Qty/No	Price/Ra T	Amount
Avigilon 5.0TB-HD-NVR Work station Server	1.00	\$2,540.00 ✓	\$2,540.00
Northern PTZ-27 27x Zoom	3.00	\$999.00 ✓	\$2,997.00
Avigilon 2.0W-H3-B01-IR 2mp Night Vision Camera	4.00	\$915.00 ✓	\$3,660.00
Altronix ALT824VDC 8 Channel 24 Volt Power Supply	1.00	\$199.00 ✓	\$199.00
Direct Connect CCTV Cable 1000ft Spool	1.00	\$179.00 ✓	\$179.00
Install Camera (Mount, Adjust, and Cable) Analog	3.00	\$250.00 ✓	\$750.00
Veracity CamSwitch Plus 8-port POE Unmanaged Industrial Switch with Power Supply	2.00	\$450.00 ✓	\$900.00
Avigilon ENC-4P-H264 4 Channel Analog Encoder	1.00	\$375.00 ✓	\$375.00
Install Camera (Mount, Adjust, and Cable) Cat6 Cable	4.00	\$250.00 ✓	\$1,000.00
Samsung 32" LCD T.V.	1.00	\$379.00 ✓	\$379.00





**AUDIO
DYNAMICS** inc

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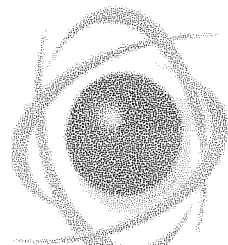
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Amount Paid	\$0.00	Amount	\$0.00
Amount Due	\$14,049.77		
		SubTotal	\$12,979.00
		State Tax 8.25% on \$12,979.	\$1,070.77
		Total	\$14,049.77



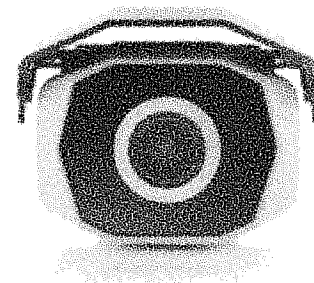
**AUDIO
DYNAMICS** inc

2.0 Megapixel WDR HD Bullet Camera

AVIGILON

Avigilon's end-to-end surveillance solutions deliver image detail no other system can match. Avigilon Control Center software, featuring High Definition Stream Management (HDSM)[™] technology combined with our broad range of megapixel cameras (from 1 MP to 29 MP) provide unprecedented clarity—while effectively managing storage and bandwidth requirements. Our components are scalable and can work together in an end-to-end system, or can be customized to create your own powerful and cost-effective solution.

The innovative HD Bullet camera is just one way Avigilon can help provide the very best monitoring and protection.



Avigilon's 2.0MP HD Bullet camera is ideal for seeing objects and activity in complete darkness. With our unique adaptive IR technology, this camera is equipped to provide both wide and narrow illumination, enabling consistent illumination in complete darkness to maximize image quality regardless of scene conditions. Avigilon's 2.0MP HD Bullet camera also features wide dynamic range (WDR) capabilities and is vandal resistant for maximum security. Onboard storage capabilities let you manage storage directly on the camera using a standard SD memory card. The Bullet camera is ideal for monitoring a variety of environments that require discreet nighttime coverage, including parking lots, campuses and industrial yards.

KEY FEATURES

- 2.0 megapixel progressive scan CMOS sensor
- Unsurpassed image quality in daytime and nighttime
- Available with 3.9 mm F1.2 or 9.22 mm F1.6 P-Iris lens with remote focus and zoom
- 30 images per second at full resolution
- 100 dB true dynamic range
- SD card slot for onboard storage support
- Integrated IR (infrared) LEDs provide uniform illumination in the dark, even at 0 lux, up to maximum of 200 ft (60 m) away
- Zoom adaptive IR provides the most effective illumination at all zoom positions
- Content adaptive IR prevents image saturation while maintaining optimum scene illumination
- Automatic Day/Night functionality with removable IR cut filter to switch to Day or Night mode depending on the light level
- PoE (Power over Ethernet) enables operating temperatures of -40°C to 50°C (-40°F to 122°F) with no auxiliary power required.
- Additional configuration Ethernet port for easy installation
- ONVIF compliant API with H.264 and Motion JPEG compression
- Vandal resistant construction and IP66 compliant

Specifications

Outline Dimensions

	2.0W-H3-B01-IR	2.0W-H3-B02-IR
CAMERA		
Image Sensor	WDR 1/3" progressive scan CMOS	
Active Pixels	1420 (H) x 1080 (V)	
Imaging Area	4.2 mm (H) x 2.4 mm (V); 0.165" (H) x 0.094" (V)	
Illuminator Technology	High power IR LEDs	
Maximum IR Illumination Distance at 0 lux	30 m (100 ft)	60 m (200 ft)
Wavelength	850 nm	
Minimum Illumination	0.2 lux (F1.2) in color mode; 0 lux in monochrome mode with IR	0.4 lux (F1.6) in color mode; 0 lux in monochrome mode with IR
Dynamic Range	100 dB	
Lens	3.9 mm, F1.2, P-iris, remote focus and zoom	9.22 mm, F1.6, P-iris, remote focus and zoom
Angle of View	26° - 79°	11° - 28°
Image Compression Method	H.264 (MPEG-4 Part 10/AVC), Motion JPEG	
Image Rate	30 (all resolutions)	
Motion Detection	Selectable sensitivity and threshold	
Electronic Shutter Control	Automatic, Manual (1/6 to 1/8000 sec)	
IR Control	Automatic, Manual	
Day/Night Control	Automatic, Manual	
Flicker Control	50 Hz, 60 Hz	
White Balance	Automatic, Manual	
Backlight Compensation	Adjustable	
Privacy Zones	Up to 64 zones	
Audio Compression Method	G.711 PCM 8 kbit	
Audio Input/Output	Line level input and output	
External I/O Terminals	Alarm In, Alarm Out	

NETWORK	
Network	100BASE-TX
Cabling Type	CAT6
Connector	RJ-45
API	ONVIF compliance version 1.0.2, 2.0.0, Profile S (www.onvif.org)
Security	Password protection, HTTPS encryption, digest authentication, WS authentication, user access log, 802.1x port based authentication
Protocol	IPv4, HTTP, HTTPS, SOAP, DNS, NTP, RTP, RTCP, RTP, TCP, UDP, ICMP, IGMP, DHCP, Zeroconf, ARP
Streaming Protocols	RTP/UDP, RTP/MCP multicast, RTP/RTSP/ICP, RTP/RTSP/HTTP/ICP, RTP/RTSP/RTCP/HTTP

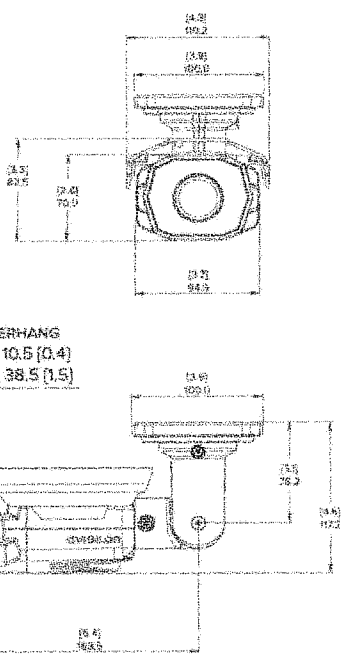
MECHANICAL	
Dimensions (LxWxH)	241.7 mm x 94.9 mm x 70 mm (9.5" x 3.7" x 2.8")
Weight	115 kg (2.5 lbs)
Body	Aluminum
Housing	Surface mount, impact resistant
Finish	Powder coat, cool grey 2
Adjustment Range	±175° pan, 45° to +90° tilt, ±175° azimuth
Onboard Storage	SD/SDHC/SDXC slot - minimum class 4, class 6 or better recommended

ELECTRICAL	
Power Consumption	22 W with external power; 12.85 W with IEEE 802.3af Class 3 PoE
Power Source	VDC: 12 V +/- 10%, 22 W min VAC: 24 V +/- 10%, 3.6 VA min PoE: IEEE 802.3af Class 3 compliant

ENVIRONMENTAL	
Operating Temperature	-40°C to +50°C (-40°F to 122°F)
Storage Temperature	-40°C to +70°C (-40°F to 158°F)

CERTIFICATIONS				
Safety	UL 60950 CSA 60950 CB Scheme	UVV CE RoHS	WEEE C-Tick	
Environmental	IK10 Impact Rating		Meets IP68 Weather Rating	
Electromagnetic Emissions	FCC Part 15 Subpart B Class B	IC ICES-003 Class B	EN 55022 Class B	
Electromagnetic Immunity	EN 55024 Class B EN 61000-4-2 EN 61000-4-3	EN 61000-4-4 EN 61000-4-5	EN 61000-4-6 EN 61000-4-11	

ORDERING INFORMATION	2.0W-H3-B01-IR	2.0 Megapixel WDR 3.9mm HD Bullet Camera
	2.0W-H3-B02-IR	2.0 Megapixel WDR 9.22mm HD Bullet Camera



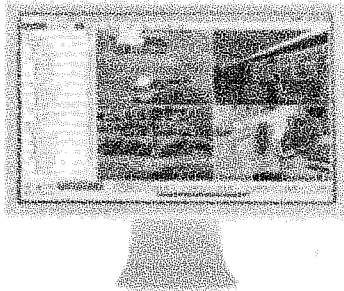
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2.0W-H3-B01-IR
2.0W-H3-B02-IR

Avigilon Control Center 5.2 software with HDSM™ Technology

AVIGILON



Avigilon™ Control Center (ACC) is the industry's easiest-to-use video management software, and has revolutionized how security professionals manage and interact with high definition video. As a distributed network platform with enterprise-class reliability, Avigilon Control Center is able to efficiently capture, manage and store high definition surveillance video while intelligently managing bandwidth and storage. Avigilon Control Center can be pre-installed and configured on an Avigilon™ Network Video Recorder (NVR) or work as stand-alone software, to meet the needs of any type of installation.

Avigilon Control Center records and manages both video and audio from Avigilon's line of megapixel cameras (from 1 MP to 29 MP). ACC can seamlessly integrate conventional analog cameras, along with a broad range of third-party IP cameras and encoders, giving you the ability to build a hybrid system — providing you with a budget-conscious migration from analog to digital. ACC's easy-to-use interface allows personnel to evaluate and respond to events with minimal training.

HDSM Technology

Avigilon Control Center uses our unique HDSM™ software technology to efficiently compress and preserve image quality while intelligently managing HD image transmission throughout the Avigilon system — sending only the requested portions of captured images to operator workstations. This technology delivers the best possible image quality while providing immediate savings in transmission bandwidth allowing operators to use less powerful workstations and thereby reducing costs. Our HDSM technology leverages leading imaging, hardware, data compression and information technologies to maximize performance of the Avigilon system.

Avigilon Control Center 5 Features

User Interface

Powerful software doesn't have to be complicated. That's why we've made the easiest-to-use interface on the market even easier. Avigilon Control Center's system explorer functionality gives you more control over what you see at your workstation or video wall by allowing you to resize the interface — so you can focus on image windows rather than a complicated screen layout. For greater efficiency, we've made the controls you use most often the easiest to access, and the ones you use the least, tucked away nearby for easy accessibility.

Collaborative Investigations

ACC 5 allows multiple operators to view and interact with the same layout and interface in real time. Now a user can push their feed to another workstation, and they both have complete control to manipulate and maneuver it on their own, saving the users time by letting them demonstrate incidents and review HD video together — all without ever being in the same room.

Available in: Enterprise

Crash-Proof Enterprise Server Management

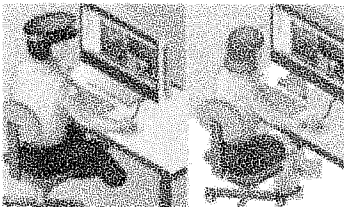
Up to 100 servers can be synchronized as a single cluster, operating as one unit, with no dedicated management server required. So if one goes down, the others are still fully operational and already have the information and settings that would normally be lost. And adding new servers is as easy as plugging them in — they'll automatically grab all the user's information and settings, with no setup required.

Available in: Enterprise

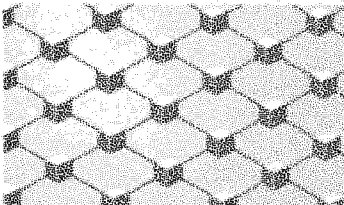
Centralized System Administration

Large enterprises can manage users from a centralized system and standardize deployments by providing the ability to deliver the right information to the right people at the right time. The system allows a central administrator to delegate the management of local users and groups to a local administrator without giving them access to systems outside their jurisdiction.

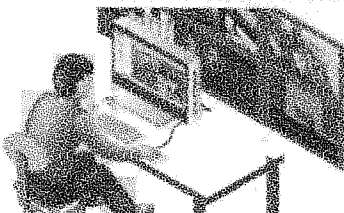
Available in: Enterprise



COLLABORATIVE INVESTIGATIONS

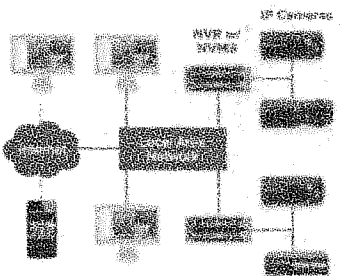
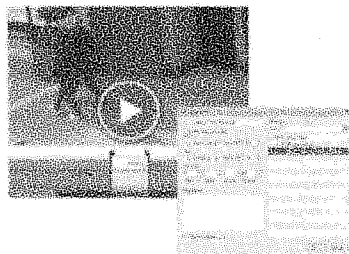
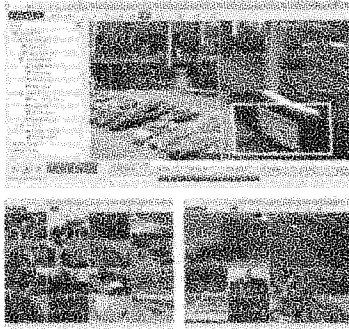


CRASH-PROOF SERVER MANAGEMENT



INTELLIGENT VIRTUAL MATRIX

Avigilon Control Center 5.2 software with HDSM™ Technology



Intelligent Virtual Matrix

With ACC 5, you can flawlessly transform your static video wall into an intelligent video wall, finally utilizing its full capabilities — easily maneuver through camera feeds, manipulate your wall's layout, interact with video, zoom, rewind, isolate, and much more.

Available In: Enterprise

Multi-Megapixel High-Dynamic-Range Image Display

- Analyze detailed regions from single or multiple cameras.
- Use viewing tabs to allow single operators to switch between multiple cameras located throughout large enterprise systems.
- Digitally zoom and pan within an image with a mouse or surveillance joystick. Automatic dynamic contrast enhancement reveals low-light details for unmatched digital PTZ performance.
- View live or recorded high definition surveillance footage.

Data Protection and Storage Management

- Redundant recording to multiple NVRs allows a full live mirror of all high definition video. Automatic fail-over NVRs ensure uninterrupted recording if an NVR becomes unavailable.
- Integrated backup and restore functionality allows recorded HD video from multiple cameras to be securely transferred from an NVR on a defined schedule.
- Allocate more storage capacity to recent events and taper archived surveillance footage for maximum record times with data aging.

Integrated Graphic Mapping for System Layout

- Graphic-mapping interface lets operators layout cameras and servers on an imported map for easy navigation of large surveillance systems.
- Maps can be layered and nested, allowing easy navigation through satellite maps, multi-story buildings and very large areas.

HD Recording and Playback Timeline

- Timeline interface with integrated drag-to-zoom capability allows full control over high definition surveillance video playback, in forward and reverse, at variable speeds—up to 8 times faster than real time.
- Rapidly updating playback system allows intuitive jog or shuttle playback to identify key events and subtle changes.

Bandwidth Management and Remote Viewing

- Fine-tune camera bandwidth usage to optimize image quality and network bandwidth availability with Avigilon's High Definition Stream Management (HDSM)™ technology.
- Remotely connect to multiple recorders to view live and recorded surveillance footage over the local area network (LAN) or a wide area network (WAN) connection.

Bookmark and Export HD Surveillance Footage

- Bookmark and export movies or still images in industry-standard formats or in Avigilon loss-less format for third-party forensic work.
- Exported video can be managed via the Avigilon Control Center Player — which provides all the tools required for analyzing and reviewing captured HD surveillance footage.
- Bookmarked events are indexed to allow rapid searching using user defined metadata.
- Bookmarks can be made private to maintain the security of an ongoing investigation.

Video Search

- Unique sub-region thumbnail searching allows you to rapidly find small changes within HD surveillance, covering large areas.
- Quickly and accurately navigate through large amounts of recorded high definition video with camera-specific event logs.
- Search through alarms, point-of-sale transactions, license plates and bookmarks.

Advanced Control Center Features

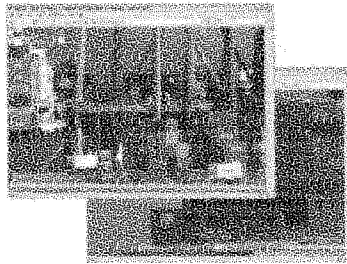
Alarm Escalation

- Allows the creation of complete end-to-end workflows for the monitoring, assignment, and acknowledgement of alarms.
- Can be triggered by any internal system event, as well as external third-party access control and building management system triggers.
- Allows organizations to set time-sensitive alerts according to priority to ensure that alerts are addressed and appropriately escalated.

POS Transaction Engine

- Link HD surveillance footage (viewed instantly) with transaction data to address compliance requirements and reduce shrinkage and theft.

Avigilon Control Center 5.2 software with HDSM™ Technology



- Exception filtering and reporting allows the triggering of events when transactions match specified criteria.

License Plate Recognition

- Detects specific regional license plates as they appear in the camera field of view to monitor vehicle traffic.
- Provides a Watch List feature to notify users when specific license plates are detected in the scene.

Acquisition Manager

- Ensures that all Avigilon™ cameras, regardless of resolution, are always configured to collect the best possible image over a wide range of lighting conditions.
- Configure multiple independent camera-specific motion-detection zones for pre- or post-motion-triggered recording.

Simple Camera and Server Installation

- Unique plug-and-play capabilities for NVRs and cameras automatically identify themselves on the network, without manual configuration

or searching—eliminating complex network configuration.

Detailed Management, Monitoring, and Reporting of System Status and Security

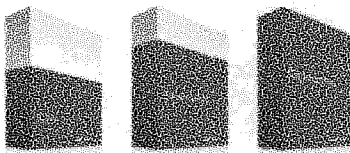
- Detailed logs of storage, network, and overall system status to ensure the highest possible system uptime for critical applications.
- Powerful rules engine lets administrators and operators map any camera or system event to an action, such as triggering output alarm relays, for faster identification and improved response times.
- Programmable email alerts provide rapid remote notification in the event of camera tampering, a system alert, an alarm or a motion event.

Scalable Integration with Legacy Systems

- Distributed architecture features a .NET-based API that can easily be integrated with other systems, such as access control and building management.
- Benefit from a new level of HD video surveillance while maintaining a single interface and minimizing training costs.

CORE, STANDARD & ENTERPRISE

To create the best-matched system for your surveillance needs, the Avigilon Control Center software is offered in three editions: Core, Standard and Enterprise. The Enterprise edition includes more advanced features for a sophisticated solution, whereas the Standard edition is used for more focused needs or for those looking to transition to HD surveillance in the most cost-effective way. ACC Core is an entry-level version of our award-winning software that delivers advanced high definition surveillance capabilities, ease of use, and superior image quality to smaller implementations. No matter what the size of your installation, you can customize a solution that is right for you.



System	Core	Standard	Enterprise
Number of cameras per server	24	48	128
Number of servers per site	1	1	100
Number of concurrent server connections	1	24	Unlimited
Number of client licenses per server	2	8	Unlimited
High Definition Stream Management (HDSM)™	Yes	Yes	Yes
Industry's most powerful VMS engine	Yes	Yes	Yes