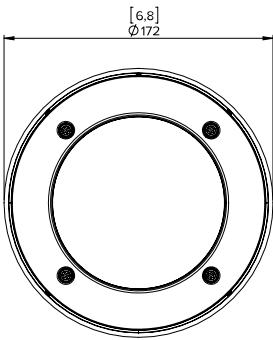
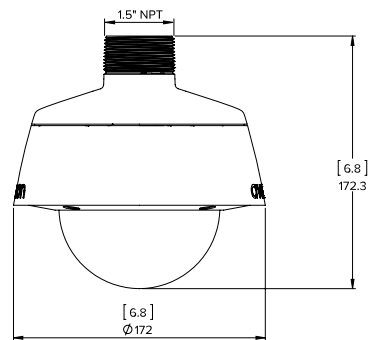


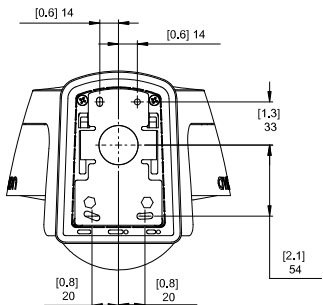
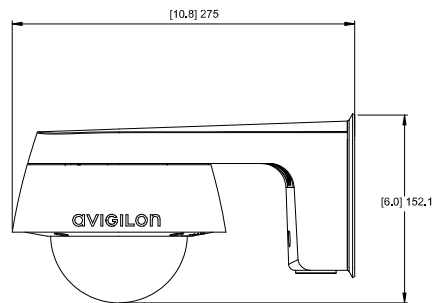
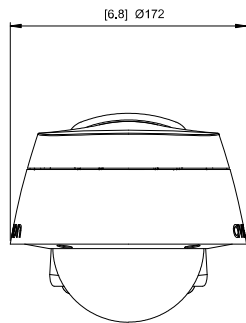
PENDANT DOME CAMERA

(H5A-DP)

WITH MPT MOUNT
(H4A-MT-NPTA1)

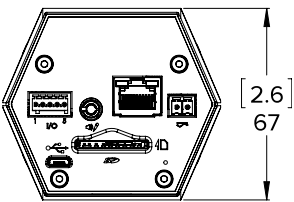
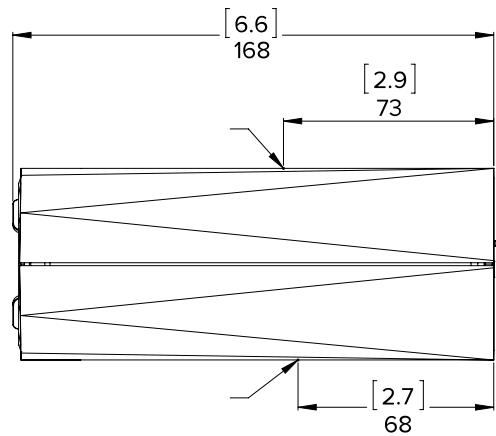
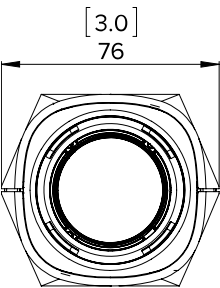


WITH WALL MOUNT
(H4A-MT-WALL1)



BOX CAMERA

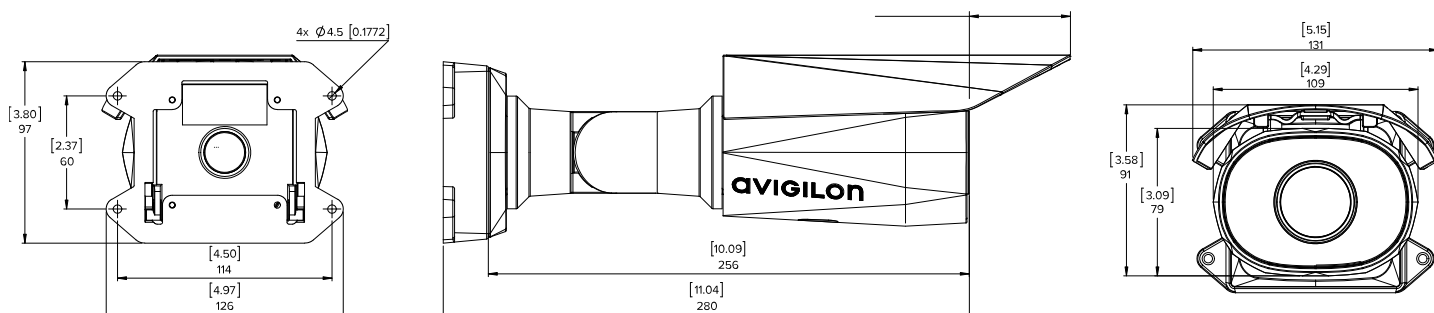
(H5A-B)



[X.X]	INCHES
X	MM

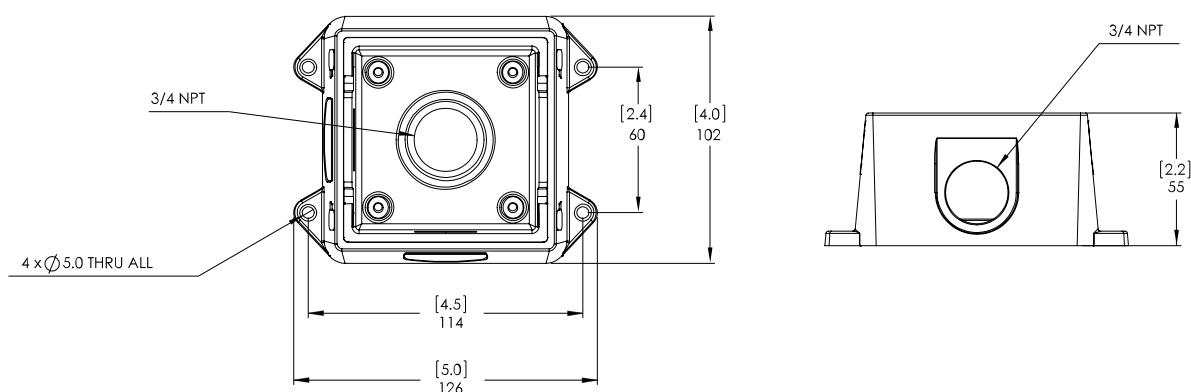
BULLET CAMERA

(H5A-B0-IR)



HD BULLET CAMERA JUNCTION BOX

(H4-B0-JBOX1)



ORDERING INFORMATION

SURFACE MOUNT OUTDOOR DOME CAMERA

(H5A-D0)

	MP	WDR	LIGHTCATCHER TECHNOLOGY	LENS	IR	ANALYTICS	HDSM SMARTCODEC
2.0C-H5A-D01	2.0	✓	✓	3.3 - 9 mm		✓	✓
2.0C-H5A-D01-IR	2.0	✓	✓	3.3 - 9 mm	✓	✓	✓
2.0C-H5A-D02	2.0	✓	✓	9 - 22 mm		✓	✓
4.0C-H5A-D01	4.0	✓	✓	3.3 - 9 mm		✓	✓
4.0C-H5A-D01-IR	4.0	✓	✓	3.3 - 9 mm	✓	✓	✓
4.0C-H5A-D02	4.0	✓	✓	9 - 22 mm		✓	✓
5.0C-H5A-D02	5.0	✓	✓	9 - 22 mm		✓	✓
6.0C-H5A-D01	6.0	✓	✓	4.9 - 8 mm		✓	✓
6.0C-H5A-D01-IR	6.0	✓	✓	4.9 - 8 mm	✓	✓	✓
8.0C-H5A-D01	8.0	✓	✓	4.9 - 8 mm		✓	✓
8.0C-H5A-D01-IR	8.0	✓	✓	4.9 - 8 mm	✓	✓	✓

H4A-D0-SMOK1	Outdoor dome camera cover with smoked bubble
H4A-D0-CLER1	Outdoor dome camera cover with clear bubble
H4A-AC-GROM1	Camera sealing grommet, pack of 10
CM-AC-GROM1	Pipe grommet, pack of 10

H4-AC-WIFI2-NA / H4-AC-WIFI2-EU	USB Wi-Fi adapter
CM-AC-AVIO1	3.5 mm jack with 1.8 m fly wire

PENDANT MOUNT OUTDOOR DOME CAMERA

(H5A-DP)

	MP	WDR	LIGHTCATCHER TECHNOLOGY	LENS	IR	ANALYTICS	HDSM SMARTCODEC
2.0C-H5A-DP1	2.0	✓	✓	3.3 - 9 mm		✓	✓
2.0C-H5A-DP1-IR	2.0	✓	✓	3.3 - 9 mm	✓	✓	✓
2.0C-H5A-DP2	2.0	✓	✓	9 - 22 mm		✓	✓
4.0C-H5A-DP1	4.0	✓	✓	3.3 - 9 mm		✓	✓
4.0C-H5A-DP1-IR	4.0	✓	✓	3.3 - 9 mm	✓	✓	✓
4.0C-H5A-DP2	4.0	✓	✓	9 - 22 mm		✓	✓
5.0C-H5A-DP2	5.0	✓	✓	9 - 22 mm		✓	✓
6.0C-H5A-DP1	6.0	✓	✓	4.9 - 8 mm		✓	✓
6.0C-H5A-DP1-IR	6.0	✓	✓	4.9 - 8 mm	✓	✓	✓
8.0C-H5A-DP1	8.0	✓	✓	4.9 - 8 mm		✓	✓
8.0C-H5A-DP1-IR	8.0	✓	✓	4.9 - 8 mm	✓	✓	✓

H4A-DP-SMOK1	Pendant dome camera cover with smoked bubble
H4A-DP-CLER1	Pendant dome camera cover with clear bubble
H4A-MT-WALL1	Indoor/outdoor pendant wall arm mount
H4A-MT-NPTA1	Indoor/outdoor pendant NPT mount
H4-MT-POLE1	Aluminum pole mounting bracket for pendant dome cameras, compatible with H4A-MT-WALL1
H4-MT-CRNR1	Aluminum corner mounting bracket for pendant dome cameras, compatible with H4A-MT-WALL1
CM-AC-GROM1	Pipe grommet, pack of 10
H4-AC-WIFI2-NA / H4-AC-WIFI2-EU	USB Wi-Fi adapter
CM-AC-AVIO1	3.5 mm jack with 1.8 m fly wire

OUTDOOR BULLET CAMERA

	MP	WDR	LIGHTCATCHER TECHNOLOGY	LENS	IR	ANALYTICS	HDSM SMARTCODEC
2.0C-H5A-B01-IR	2.0	✓	✓	3.3 - 9 mm	✓	✓	✓
2.0C-H5A-B02-IR	2.0	✓	✓	9 - 22 mm	✓	✓	✓
4.0C-H5A-B01-IR	4.0	✓	✓	3.3 - 9 mm	✓	✓	✓
4.0C-H5A-B02-IR	4.0	✓	✓	9 - 22 mm	✓	✓	✓
5.0C-H5A-B02-IR	5.0	✓	✓	9 - 22 mm	✓	✓	✓
6.0C-H5A-B01-IR	6.0	✓	✓	4.9 - 8 mm	✓	✓	✓
8.0C-H5A-B01-IR	8.0	✓	✓	4.9 - 8 mm	✓	✓	✓

H4-B0-JBOX1	Junction box for bullet cameras
H4-MT-POLE1	Aluminum pole mounting bracket for bullet cameras, compatible with H4-B0-JBOX1
H4-MT-CRNR1	Aluminum corner mounting bracket for bullet cameras, compatible with H4-B0-JBOX1
H4-AC-WIFI2-NA / H4-AC-WIFI2-EU	USB Wi-Fi adapter

BOX CAMERA

	MP	WDR	LIGHTCATCHER TECHNOLOGY	LENS	IR	ANALYTICS	HDSM SMARTCODEC
2.0C-H5A-B1	2.0	✓	✓	4.7 - 84.6 mm		✓	✓
2.0C-H5A-B2	2.0	✓	✓	3.3 - 9 mm		✓	✓
4.0C-H5A-B2	4.0	✓	✓	3.3 - 9 mm		✓	✓
4.0C-H5A-B3	4.0	✓	✓	9 - 22 mm		✓	✓
6.0C-H5A-B2	6.0	✓	✓	4.9 - 8 mm		✓	✓
8.0C-H5A-B2	8.0	✓	✓	4.9 - 8 mm		✓	✓

H4-AC-WIFI2-NA / H4-AC-WIFI2-EU	USB Wi-Fi adapter
CM-AC-AVIO1	3.5 mm jack with 1.8 m fly wire

SURFACE MOUNT INDOOR DOME CAMERA

	MP	WDR	LIGHTCATCHER TECHNOLOGY	LENS	IR	ANALYTICS	HDSM SMARTCODEC
2.0C-H5A-D1	2.0	✓	✓	3.3 - 9 mm		✓	✓
2.0C-H5A-D1-IR	2.0	✓	✓	3.3 - 9 mm	✓	✓	✓
2.0C-H5A-D2	2.0	✓	✓	9 - 22 mm		✓	✓
4.0C-H5A-D1	4.0	✓	✓	3.3 - 9 mm		✓	✓
4.0C-H5A-D1-IR	4.0	✓	✓	3.3 - 9 mm	✓	✓	✓
4.0C-H5A-D2	4.0	✓	✓	9 - 22 mm		✓	✓
6.0C-H5A-D1	6.0	✓	✓	4.9 - 8 mm		✓	✓
6.0C-H5A-D1-IR	6.0	✓	✓	4.9 - 8 mm	✓	✓	✓
8.0C-H5A-D1	8.0	✓	✓	4.9 - 8 mm		✓	✓
8.0C-H5A-D1-IR	8.0	✓	✓	4.9 - 8 mm	✓	✓	✓

H4A-DD-SMOK1	Indoor dome camera cover with smoked bubble
H4A-DD-CLER1	Indoor dome camera cover with clear bubble
H4A-DD-SMOK1-BL	Black indoor dome camera cover with smoked bubble
H4A-DD-CLER1-BL	Black indoor dome camera cover with clear bubble
H4A-DD-SDWL1	Indoor dome camera sidewall knockout plug, pack of 5
H4A-DD-SDWL1-BL	Black indoor dome camera sidewall knockout plug, pack of 5
H4-AC-WIFI2-NA / H4-AC-WIFI2-EU	USB Wi-Fi adapter
CM-AC-AVIO1	3.5 mm jack with 1.8 m fly wire

IN-CEILING MOUNT INDOOR DOME CAMERA

	MP	WDR	LIGHTCATCHER TECHNOLOGY	LENS	IR	ANALYTICS	HDSM SMARTCODEC
2.0C-H5A-DC1	2.0	✓	✓	3.3 - 9 mm		✓	✓
2.0C-H5A-DC1-IR	2.0	✓	✓	3.3 - 9 mm	✓	✓	✓
2.0C-H5A-DC2	2.0	✓	✓	9 - 22 mm		✓	✓
4.0C-H5A-DC1	4.0	✓	✓	3.3 - 9 mm		✓	✓
4.0C-H5A-DC1-IR	4.0	✓	✓	3.3 - 9 mm	✓	✓	✓
4.0C-H5A-DC2	4.0	✓	✓	9 - 22 mm		✓	✓
6.0C-H5A-DC1	6.0	✓	✓	4.9 - 8 mm		✓	✓
6.0C-H5A-DC1-IR	6.0	✓	✓	4.9 - 8 mm	✓	✓	✓

	MP	WDR	LIGHTCATCHER TECHNOLOGY	LENS	IR	ANALYTICS	HDSM SMARTCODEC
8.0C-H5A-DC1	8.0	✓	✓	4.9 - 8 mm		✓	✓
8.0C-H5A-DC1-IR	8.0	✓	✓	4.9 - 8 mm	✓	✓	✓

H4A-DC-SMOK1	In-ceiling dome camera cover with smoked bubble
H4A-DC-CLER1	In-ceiling dome camera cover with clear bubble
H4A-DC-SMOK1-BL	Black in-ceiling dome camera cover with smoked bubble
H4A-DC-CLER1-BL	Black in-ceiling dome camera cover with clear bubble
H4-DC-CPNL1	Metal ceiling panel
H4A-AC-GROM1	Camera sealing grommet, pack of 10
H4-AC-WIFI2-NA / H4-AC-WIFI2-EU	USB Wi-Fi adapter
CM-AC-AVIO1	3.5 mm jack with 1.8 m fly wire

OPTIONAL CAMERA LICENSES AND ACCESSORIES

CAM-FIPS	Camera license to enable FIPS Level 1 cryptographic mode on any H5A camera
CAM-FIPS-CRYPT-R-L3	MSI CRYPT-R SD with camera license to enable FIPS Level 3 cryptographic mode on H5A cameras ¹

¹ Excludes H5A Explosion-Protected camera line.

SUPPORT

Learn more and find additional documentation at [avigilon.com](https://www.avigilon.com) or email asksales@avigilon.com for specific product support.



Jul 2021 | Rev 15

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Avigilon Self-Learning Video Analytics

Avigilon self-learning analytics extend the effectiveness of your security personnel by providing effective monitoring and enabling proactive, real-time response from your team. Built from the ground up to manage high-definition video, Avigilon offers analytics embedded in Avigilon cameras up to 5K (16 MP) resolution.

Through the use of advanced pattern-based analytics and teach-by-example technology, Avigilon video analytics are designed to increase the productivity of security personnel while making monitoring more affordable and efficient.



Advanced pattern-based analytics

Avigilon advanced video pattern detection technology is able to accurately recognize the movements of people and vehicles while ignoring motion not relevant to a scene. Embedded into cameras up to 5K (16 MP), the system's ability to constantly learn reduces false positives and helps ensure alerts are meaningful, which avoids wasted time and improves efficiencies.

Teach-by-example technology

Our teach-by-example object classifier technology enables users to provide feedback about the accuracy of alarm events generated by Avigilon devices. Rather than decreasing analytics sensitivity to reduce false alarms, the feedback trains the device, increasing the accuracy of the analytics used to determine which alarms are real and which are false to further improve a low false-positive alarm rate.

Over time, the system learns the scene and is able to prioritize important events based on user feedback. This increases sensitivity to conditions that are of concern while reducing false alarms to keep the focus on what matters.

KEY FEATURES

Pattern-based object classification and tracking technology.
Continuously self-learning analytics with no manual calibration required.
Efficient installation and setup.
Operator input teach-by-example technology.
Embedded in cameras for resolutions 1-16 MP.
Analytics appliances for any IP cameras or analog system.
Real time analytic rule-based alarm notifications.
Fully integrated with Avigilon Control Center™ software for an end-to-end analytics solution.
Powerful forensic video analytics accelerates forensic search times using a fully unified ACC™ client.
Cost effective. No additional servers required.
No additional licensing required for analytics and rules-based events.

Key Features and Benefits

Ease of installation and ongoing accuracy

Point-and-shoot system setup. Self-learning video analytics works out of the box with no manual calibration required.

Self-learning analytics lower false alarm rates

Analytics continuously adjust to increase detection and confidence levels.

Broad variety of devices

Avigilon devices embedded with self-learning video analytics include appliances and cameras with resolutions from 1 MP to 5K (16 MP).

Pattern-based object classification and tracking technology

Object classification and tracking using pattern-based analytics algorithms are tuned to recognize people and vehicles, while ignoring nuisance motion.

Operator input teach-by-example technology

Teach-by-example technology enables users to provide feedback to the system about accuracy, which further enhances the pattern-based analytics database.

Integrated with Avigilon Control Center (ACC)

Fully integrated with ACC client and ACC mobile so that users can respond in real time even from mobile devices. Analytic alarm notifications can be automatically sent to any authorized client based on configured rules.

Analytics appliances for IP cameras or analog system

Add self-learning video analytics to IP or analog surveillance camera with Avigilon analytics appliances.

Idle scene mode

Idle scene mode reduces bandwidth and storage, and is triggered by analytics specific objects rather than motion detection.

Powerful forensics

Forensic search capabilities of analytics events accelerate search times using a fully unified ACC client.

Cost effective

No additional servers required.

No licensing required

Fully embedded edge analytics with no additional rules-based licensing on cameras.

The Avigilon Video Management Solution

Avigilon Control Center (ACC) video management software provides the ability for analytics events and alarms to be viewed and searched through an intuitive user interface. Real-time events and forensic capabilities detect and notify scene changes, missing objects and rules violations — all through an easy-to-use interface. Avigilon Control Center software gives you full control over playback of events, enabling you to quickly retrieve evidence to speed up response times and investigations.

RULES AND ALARMS

The Avigilon Control Center rules engine enables you to selectively apply analytics-based events as alarms and rule triggers, providing local or mobile users with immediate notifications for suspicious activities.

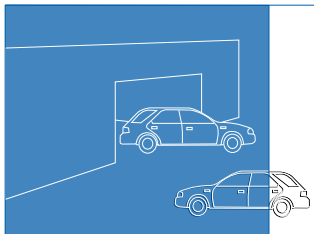
INTELLIGENT SEARCH OF CLASSIFIED OBJECTS

Avigilon Control Center software uses powerful analytics technology to intelligently search for specified events of classified objects to help you find the video you need quickly.

Avigilon Analytics Rules

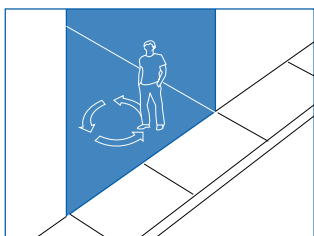
The following is a complete list of Avigilon self-learning video analytics features for object detection and classification for live or forensic events. The following images are for illustration purposes only.

OBJECTS IN AREA



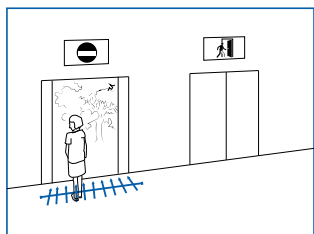
The event is triggered when the selected number of objects are present in the region of interest. The object can appear from within the region of interest or enter from outside the region of interest.

OBJECT LOITERING



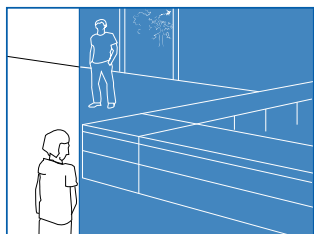
The event is triggered for each object that stays within the region of interest for an extended amount of time.

OBJECTS CROSSING BEAM



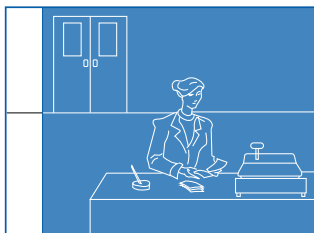
The event is triggered when the specified number of objects have crossed the directional beam that is configured over the camera's field of view in the selected time period. The beam can be unidirectional or bidirectional.

OBJECT APPEARS OR ENTERS AREA



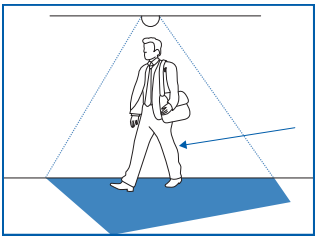
The event is triggered by each object present in the region of interest. The object can appear from within the region of interest or enter from outside the region of interest.

OBJECT NOT PRESENT IN AREA



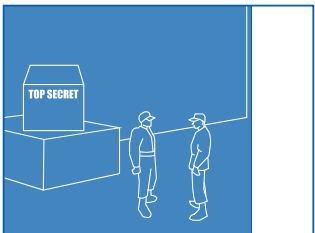
The event is triggered when no objects are present in the region of interest.

OBJECTS ENTER AREA



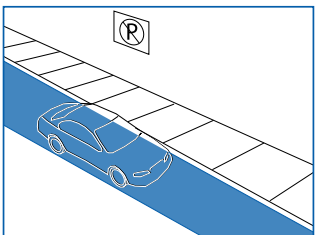
The event is triggered when the specified number of objects have entered the region of interest from outside of the region.

OBJECTS LEAVE AREA



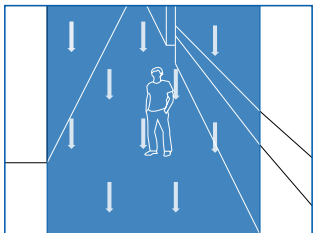
The event is triggered when the specified number of objects have left the region of interest.

OBJECT STOPS IN AREA



The event is triggered for each object in a region of interest that stops moving for the specified threshold time.

DIRECTION VIOLATED



The event is triggered for each object that moves in the prohibited direction of travel.

CAMERA TAMPERING



The event is triggered when the scene unexpectedly changes.

IDLE SCENE MODE



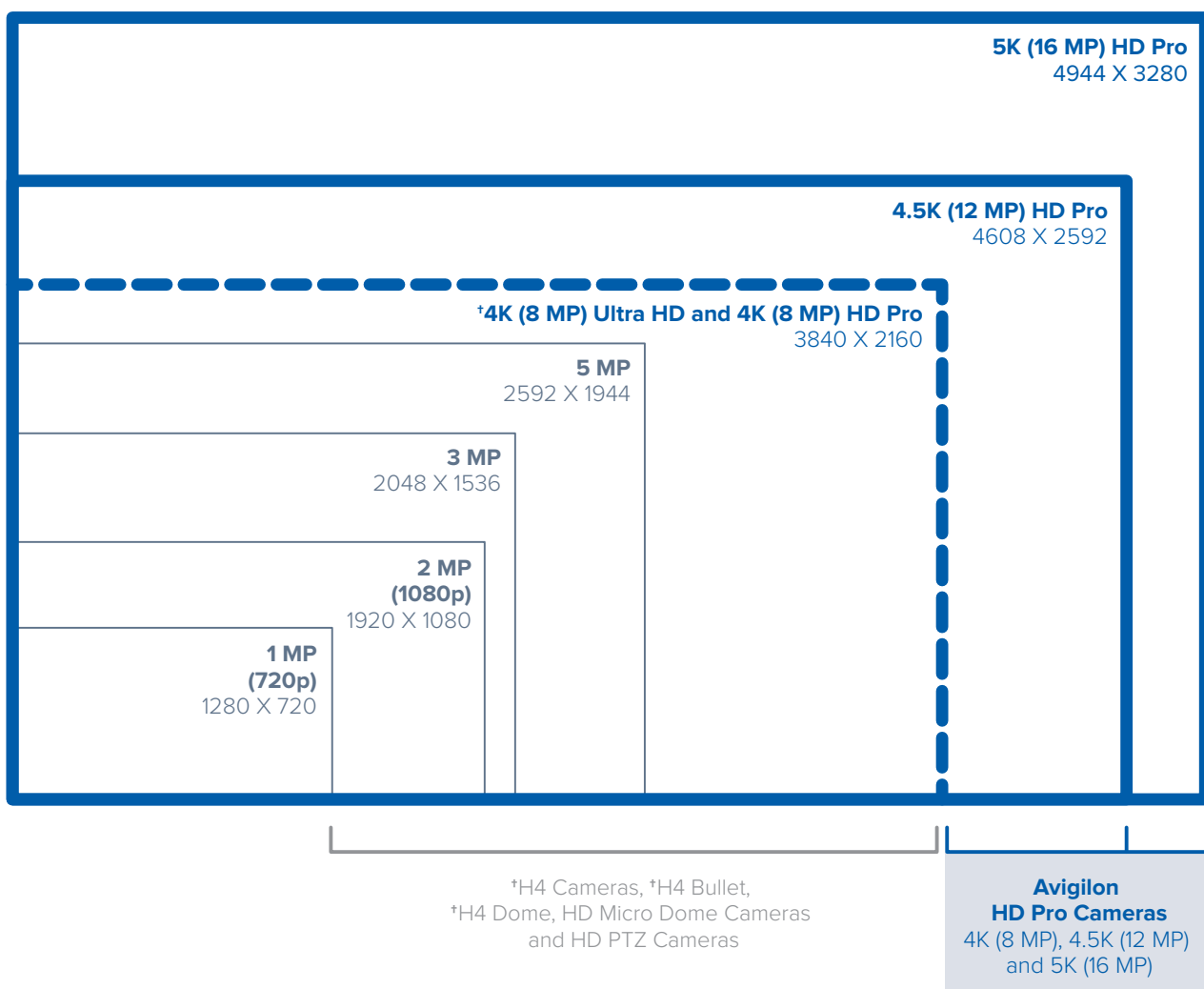
Analytic capable cameras will stream at a different image rate and reduced quality while no events are detected in the scene.

ANALYTICS SOFTWARE REQUIREMENTS & CAPABILITIES

Setup with Avigilon Control Center software	ACC version 6.x; or ACC version 5.4 and later
Setup with Avigilon Rialto™ Devices for Third-Party Cameras	Avigilon View
Real-Time Alerts and Events Configuration	Set up in ACC client
Real-Time Alerts and Events Notification	ACC client, other multiple notifications possible based on rules engine configuration
Forensic Search Capabilities	Set up in ACC client
Display of Video ACC Client for Forensic Searches	ACC client

SUPPORTED VIDEO ANALYTICS DEVICES

Avigilon H3A Series	1-3MP; bullet, dome and camera form factors
Avigilon HD Pro Series	4K (8 MP), 4.5K (12 MP) and 5K (16 MP)
Avigilon H4 Series	1-5 MP and 4K (8 MP); bullet, dome and camera form factors
ACC ES Analytics Appliance	Supports up to 4 direct camera connection channels, or up to 4 x Avigilon H.264 Analog Video Encoders
Avigilon Rialto Series	<ul style="list-style-type: none"> Rialto I4, A4 and R-Series Avigilon View software is required Supported resolutions: <ul style="list-style-type: none"> D1 720 and 1080p (1920 x 1080) resolutions at 30fps using RTSP H.264 video streaming Analog 3rd party camera connection supports D1 resolution at 30fps



Avigilon Video Archive

225TB

488TB

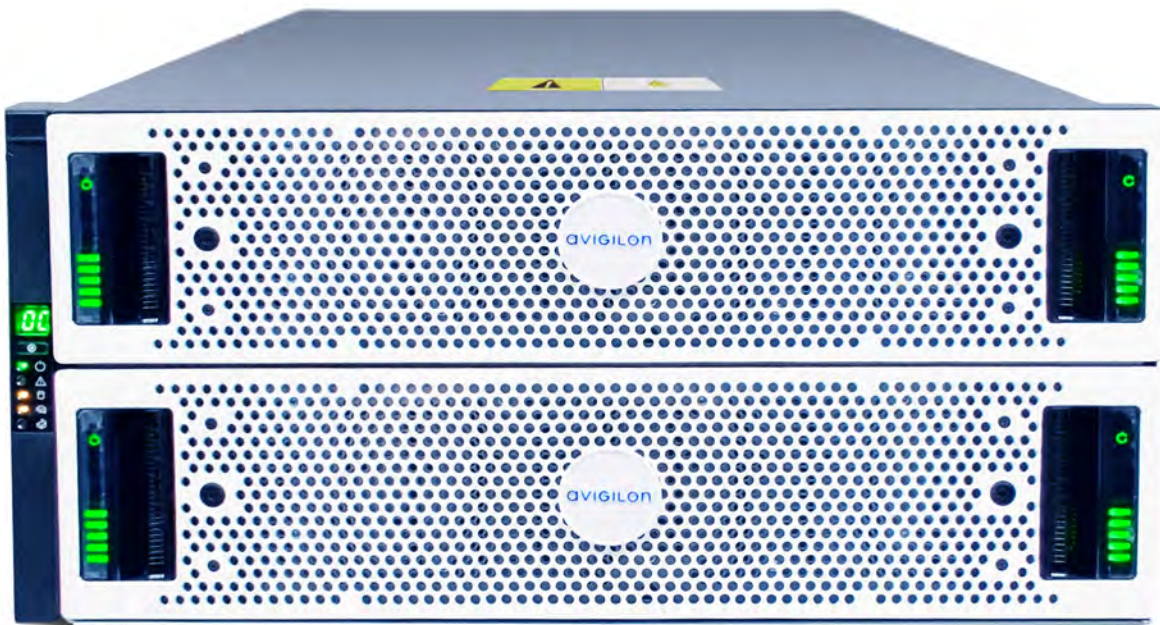
751TB

1PB

1.3PB

1.5PB

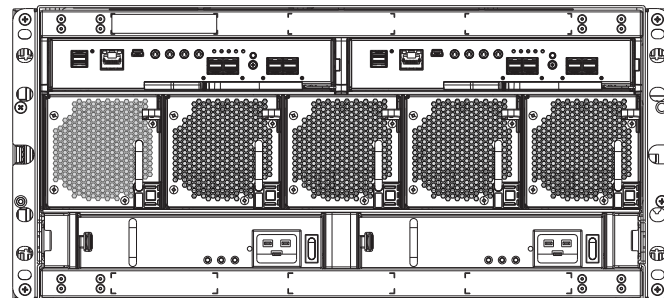
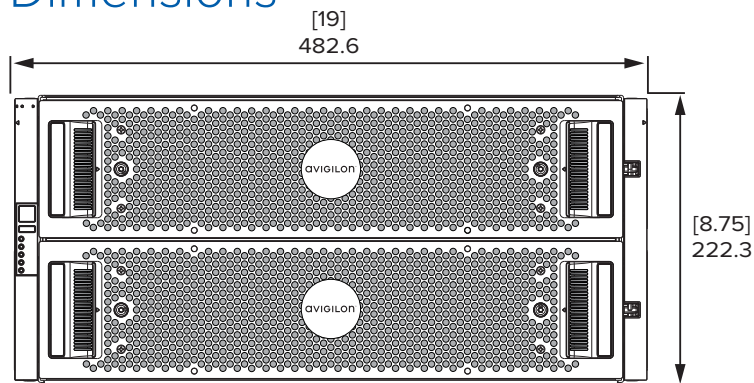
The Avigilon Video Archive is a scalable storage expansion solution that is fully integrated with Avigilon Control CenterTM software and Network Video Recorders. This cost-effective technology offers an Avigilon-backed solution that helps deliver a complete, end-to-end video security platform. The Avigilon Video Archive is built on hardware technology that delivers superior reliability with no single point of failure and near zero downtime, ensuring video archives are preserved for swift on-demand retrieval and review.



Key Benefits

- **Pay as you grow** - Scalable from 336TB to 2PB (RAW) per Network Video Recorder with enterprise NL-SAS drives to cost-effectively grow in lock-step with your organization
- **Fully integrated with ACC and Site Health** - Simplifies management of multiple Petabytes of data and provides system health status in ACCTM dashboards
- **Maximize uptime** - Mission critical design with fully redundant architecture that eliminates any single point of failure
- **Prevent data loss** - Minimize risk of data loss and non-compliance via erasure coding's fast rebuild capability, vastly outperforming RAID alternatives
- **Avigilon-backed Support** - Up to 5 years of onsite support (Next business day) with optional "keep-your-drive" warranty that ensures no drive ever leaves your premises

Dimensions



[X.X]	INCHES
X	MM

Specifications

SYSTEM	Form Factor	5U Rackmount
	Maximum Storage	2 PB Raw or 1.5PB usable
	Drive Bays	84 × 3.5" Bays
	Hard Drives Supported	Nearline SAS
	Max Number of NVRs Connected	4 per Head Unit when attached directly 12 per Head Unit when using 2 network switches*
	Supported NVRs	NVR Standard and Premium Models
	Supported Operating Systems	Windows Server 2016
	Connectivity	Redundant Path 10Gb iSCSI
	Ports	8× SFP+ and 2 × 12Gb SAS
	Data Protection	Erasure Coding
	Controller	Dual Hot Swappable Redundant Storage Controllers
	Expansion Options	Internal disk packs and one Direct Attach SAS Expansion Chassis with up to 84 drives
	Warranty	3 Years Next Business Day on-site support. Extendable to 5 years. Optional Keep Your Drive Warranty available.
	* 12 NVRs must be connected through 2x 10GbE SFP+ network switches to ensure redundancy. The switches are not sold by Avigilon and should be sourced by the customer. Each switch must support at least 12x Downlink ports (1 per NVR) and 4x Uplink ports.	
MECHANICAL	Power	200~240VAC , 2200W Dual Redundant
	Operating Temperature	5°C ~ 40°C (41°F~104°F)
	Operating Humidity	10 - 80% (non-condensing)
	Dimensions (W×D×H)	482.6mm × 892.2mm × 222.3mm; 19" × 35.12" × 8.75"
	Maximum Weight	135 kg; 298 lb
CERTIFICATIONS	Certifications/Directives	UL, cUL, CE, ROHS, RCM, NOM, BIS, BSMI, EAC, KC, NRCS, VCCI
	Safety	UL/CSA/EN/IEC/EN 62368-1
	Electromagnetic Emissions	FCC Part 15 Subpart B, IC ICES-003, EN 55032, EN 61000-3-2, EN 61000-3-3
	Electromagnetic Immunity	EN 55024
ORDERING INFORMATION	PRODUCTS	
	AVA-HED1-225TB	Avigilon Video Archive Head Unit, 225TB, 5U
	AVA-HED1-488TB	Avigilon Video Archive Head Unit, 488TB, 5U
	AVA-HED1-751TB	Avigilon Video Archive Head Unit, 751TB, 5U
	AVA-EXP1-263TB	Avigilon Video Archive Expansion Unit, 263TB, 5U
	AVA-EXP1-526TB	Avigilon Video Archive Expansion Unit, 526TB, 5U
	AVA-EXP1-789TB	Avigilon Video Archive Expansion Unit, 789TB, 5U
	AVA-HDD1-263TB	Avigilon Video Archive, Expansion Disk Pack, 263TB
	NVR4X ACCESSORIES	
	AVA-HED1-NVR4X-PRM1-CONNECT	Avigilon Video Archive, Connectivity Kit for NVR4X PRM 64/96/128/157TB
	AVA-HED1-NVR4X-PRM2-CONNECT	Avigilon Video Archive, Connectivity Kit for NVR4X PRM 192/217TB
	AVA-HED1-NVR4X-STD-CONNECT	Avigilon Video Archive, Connectivity Kit for NVR4X STD
	NVR4 ACCESSORIES	
	AVA-HED1-NVR4-CONNECT	Avigilon Video Archive, Connectivity Kit for NVR4 PRM and NVR4 STD
	HD-NVR4-STD-2NDCPU	NVR4 Standard, 2nd CPU Kit (Required for NVR4 STD with AVA-HED1-NVR4-CONNECT)



RACK (33)

UPS (33)

NTSP (33)

NSW (33)

FCAM (127)

PTZ (1)

CP (32)

Site: Golden Beach
Survey: Golden Beach
Overview Camera Views
By: Bryan Rice
Date: 2022-10-24









Estimate

EST-005925

Techpro Security Products

182 Glades Rd.
Boca Raton 33432
561-922-8416

Bill To
Town of Golden Beach
1 Golden Beach Dr
Golden Beach
33160 Florida

Estimate Date : 27 Sep 2022
Reference# : Beach, Intracoastal
Account Manager : Bryan Rice

#	Item & Description	Qty	Rate	Amount
Servers and Clients				
1	AXIS Camera Station 64ch SKU : AXIS S1148 AXIS Camera Station S1148 64TB Recorder is an out-of-the-box ready rack server tested and validated with Axis products for reliable surveillance up to 4K video streams. Preconfigured and preloaded with AXIS Camera Station video management software including licenses for 48 channels plus all necessary system software. Includes 5-year limited hardware warranty, on-site hardware replacement service and keep your hard drive.	2 1	12,499.00	24,998.00
Cameras and Licenses				
2	ACAP AXIS PERIMETER DEFENDER 1 E-LICENSE Single unit e-license for AXIS Perimeter Defender, a scalable and flexible video analytics application for perimeter surveillance and protection.	65	299.00	19,435.00
3	AXIS P1467-LE Compact outdoor, NEMA 4X, IP66, IP67 and IK10-rated 5MP resolution, day/night, fixed bullet camera with Deep Learning Processing Unit (DLPU). Support for Forensic WDR and Lightfinder 2.0 and OptimizedIR. Varifocal 2.8-8 mm P-iris lens with remote zoom and focus. Multiple, individually configurable H.264/H.265 with Zipstream and Motion JPEG. 5MP at 25/30	35	849.00	29,715.00
4	AXIS Q6225-LE PTZ for the toughest conditions. MIL specified, build in IR illumination 400M (1300t), can be mounted face up or face down. IP66/67/68, IK10, MIL 8105 521, NEMA TS2 for temperature up to 74C (165F), Arctic temperature control.	1	3,699.00	3,699.00
5	AXIS Q1951-E 13mm Outdoor thermal network camera for wall and ceiling mount,	16	2,999.00	47,984.00

#	Item & Description	Qty	Rate	Amount
	384x288 resolution, 30 fps, and 13 mm lens with 28° angle of view. It supports Electronic Image Stabilization, Zipstream, ONVIF, H.264, H.265, audio in, two supervised I/O ports and local storage. It includes Video motion detection, audio detection, shock detection and support for AXIS Camera Application Platform enabling installation of AXIS Perimeter Defender with AI-based functionality and other third-party applications.			
6	AXIS Q1951-E 19mm Outdoor thermal network camera for wall and ceiling mount, 384x288 resolution, 30 fps, and 19 mm lens with 19.4° angle of view. It supports Electronic Image Stabilization, Zipstream, ONVIF, H.264, H.265, audio in, two supervised I/O ports and local storage. It includes Video motion detection, audio detection, shock detection and support for AXIS Camera Application Platform enabling installation of AXIS Perimeter Defender with AI-based functionality and other third-party applications.	4	2,999.00	11,996.00
7	AXIS Q1951-E 35mm Outdoor thermal network camera for wall and ceiling mount, 384x288 resolution, 30 fps, and 35 mm lens with 10.5° angle of view. It supports Electronic Image Stabilization, Zipstream, ONVIF, H.264, H.265, audio in, two supervised I/O ports and local storage. It includes Video motion detection, audio detection, shock detection and support for AXIS Camera Application Platform enabling installation of AXIS Perimeter Defender with AI-based functionality and other third-party applications.	9	4,099.00	36,891.00
8	AXIS S9002 MK II AXIS Camera Station S9002 Mk II Desktop Terminal is a high-performance desktop terminal to be used with Axis recorders. Optimized for surveillance purposes with four monitors and supports up to three 4K video streams. The terminal is preloaded with AXIS Camera Station software and all other necessary software. Includes 5-year limited hardware warranty, on-site hardware replacement service and international keyboard and mouse.	2	2,699.00	5,398.00
9	6TB Video Surveillance Series Hard Drive Storage SKU : HDD-6000 6TB Video Surveillance Series Hard Drive Storage	2 1	231.25	462.50
10	24in Wide Screen LCD Monitor with HDMI SKU : LCD-24 24in Wide Screen LCD Monitor with HDMI	4 1	189.00	756.00
11	Universal Articulating Wall Mount For 22" to 40" Displays SKU : TVMOUNT-UNIV ART MT F/22-40 FLT PNL TV Universal Articulating Wall Mount For 22" to 40" Displays	4	99.99	399.96
Network Components				

#	Item & Description	Qty	Rate	Amount
12	S5810-48TS-P, 48-Port Gigabit Ethernet L3 PoE+ Switch, 48 x PoE+ Ports @740W, with 4 x 10Gb SFP+ Uplinks, Broadcom Chip 8-Port Gigabit Ethernet PoE+ Switch	2	4,238.00	8,476.00
13	S5810-48FS, 48-Port Gigabit Ethernet L3 Switch, 48 x 1Gb SFP, with 4 x 10Gb SFP+ Uplinks, Stackable Switch, Broadcom Chip	2	3,718.00	7,436.00
14	8-Port Gigabit Ethernet PoE+ Switch IES3100-8TF-P, 8-Port Gigabit Ethernet L2+ Managed Industrial PoE+ Switch, 8 x PoE+ Ports @240W, with 2 x 1/2.5Gb SFP, -40 to 75°C Operating Temperature	17	463.50	7,879.50
15	NDR-240-48 240 Watt Series / 48 VDC / 5.0 Amps Industrial Single Output DIN Rail Power Supply	17	159.60	2,713.20
16	Flex Link NV-FLXLK-1X-ABNV	13	361.50	4,699.50
17	FLEX8 8 PORT POE UNMANAGED SWITCH SKU : NV-FLX-08 The plug-and-play FLEX8 unmanaged switch makes the modernization to IP devices (IoT) simple, secure and cost-effective. When paired with the FLEX Adapters, this powerful enterprise-grade switch delivers fast Ethernet and PoE over Multi-Pair UTP with up to 2,000ft (610m) reach – that's 6Xs the reach of standard Ethernet switches.	1 1	1,450.00	1,450.00
Fiber Misc				
18	4 Adapter Slot, 4 Splice Termination Box, 2 Ports FOTB-C01	12	35.50	426.00
19	Fiber Patch Cable FIBER-1MP	34	29.95	1,018.30
20	1GB SFP for Swtich SFP1G-LX-31	34	29.95	1,018.30
21	1GB DAC for Switch SFP-PC005	2	59.95	119.90
22	10GB DAC for Switch SFPP-PC01	8	137.97	1,103.76
23	Fiber Patch Panel LGX-APP11-2D-4U	1	363.95	363.95
24	Fiber LGX FT_Blank x8 LGX-LCDX-6B x4	1	799.95	799.95

#	Item & Description	Qty	Rate	Amount
25	Fiber Connectors FT-ADDX-LCSMBW	60	6.95	417.00
26	3m, 1 Fiber LC Pigtail, Single-mode, OS2 SP-1LCSM3	60	8.25	495.00
Surge Protection				
27	WattBox Standby UPS 350VA SKU : WB-OVRC-UPS-350-6 WattBox Standby UPS Battery Pack (Compact) 6 Outlets, 350VA OvrC Remote Management 2 Year Warranty	15 1	160.95	2,414.25
28	WattBox IP Power Controller 150 Series SKU : WB-150-IPCE-2 WattBox 150 Series IP Power Controller (Ultra Compact) 1 Controlled Bank, 2 Outlets	15 1	169.90	2,548.50
29	APC SMX3000LVNC APC Smart-UPS X, Line Interactive, 3kVA, Rack/tower convertible 4U, 100V-127V, 6x 5-15R+3x 5-20R+1x L5-30R NEMA, NMC, Extended runtime, Short depth	2	4,999.00	9,998.00
30	Ditek 16 Channel Wall Mount Surge SKU : SP-DTK-WM16NETS The DTK-WM16NETS is a 16-channel, wall mount surge protector that uses state-of-the-art circuitry to provide best-in-breed surge protection for Ethernet, PoE and optional PoE extender circuits.	1 1	885.99	885.99
31	Ditek 8 Channel Wall Mount Surge SKU : SP-DTK-WM8NETS The DTK-WM8NETS is an 8-channel, wall mount surge protector that uses state-of-the-art circuitry to provide best-in-breed surge protection for Ethernet, PoE and optional PoE extender circuits.	22 1	345.99	7,611.78
32	Ditek POE Surge Protection SKU : SP-DTK-MRJPOE The DTK-MRJPOE is a 10GbE PoE surge protector that is PoE Plus and High PoE ready. This point of use surge protector can be installed at the equipment end, or ahead of injectors and midspan devices. Its multi-stage, hybrid design provides superior protection for PoE applications.	5 1	96.40	482.00
Cable				
33	CAT5-DB-FT Cat 5E Direct Burial By The Foot	48,000 1	0.30	14,400.00
34	6 Strand Fiber	17,300	1.85	32,005.00
35	12 Strand Fiber	2,560	2.04	5,222.40

#	Item & Description	Qty	Rate	Amount
36	24 Strand Fiber	1,600	2.30	3,680.00
37	48 Strand Fiber	1,550	2.58	3,999.00
38	96 Strand Fiber	4,800	2.94	14,112.00
39	144 Strand Fiber	1,750	5.06	8,855.00
40	3ft Fiber Patch Cable FIBER-1MP-10GB	70	24.50	1,715.00
41	CAT5E 3ft Purple, Patch Cord, Boot & Protector, Stranded, 24AWG, UTP, UL	180	9.99	1,798.20
Misc Accessories				
42	AXIS T91B47	21	75.00	1,575.00
43	AXIS T94F01M	8	29.00	232.00
44	AXIS T94V01C	18	89.00	1,602.00
45	AXIS T91D62	18	99.00	1,782.00
46	AXIS TQ1602-E Conduit Back Box SKU : AXIS TQ1602-E Outdoor-ready, impact resistant (IK10+) back box with sealed compartment (IP66/67) for secure storage of connectivity devices. 3 /4" / M25 conduit interface from both side and back. Can be mounted directly behind a wide range of Axis network cameras. Includes a network cable and extra gaskets. Specifically designed for aesthetically pleasing installations with AXIS Q17/Q19 and P14 Camera Series	21 1	149.00	3,129.00
47	AXIS T91B57	1	249.00	249.00
48	AXIS T94J01A	1	219.00	219.00
49	POLE24F6X6 SKU : POLE24F6X6	14 1	599.95	8,399.30
50	22 Foot Concrete POLE 22 Type 1 - SU POLE with pre drilled holes Wind-Load Analysis included	7	2,550.00	17,850.00
51	RJ45 Connector (100) SKU : TOOL-WB-RJ45(100) CAT5RJ45J	4	62.98	251.92
52	WD Purple 128GB Surveillance microSD card SKU : SD-P128	65 1	63.95	4,156.75

#	Item & Description	Qty	Rate	Amount
53	RACK SPACE NETWORK SERVER CABINET SKU : 047-SRD-376837U AR3300	1 1	4,995.95	4,995.95
54	RACK/1USHELF SKU : RACK/1USHELF 1 SPACE UNIT SHELF	3 1	79.49	238.47
55	Rack Manager PWR Strip CPS1220RMS	4	179.95	719.80
56	Patch Panel TC-KP24	26	37.95	986.70
57	Cable Ducting KH-1903-3-300-02	3	59.95	179.85
58	NEMA-LARGE/O SKU : NEMA-LARGE/O NEMA 3R Rainproof Hinge Cover Wall-Mount Enclosure, Includes Mounting Board, Carbon Steel, Large, With back panel 30" x 24" x 8"	15 1	799.00	11,985.00
Materials & Labor				
59	Installation Materials SKU : MATERIALS Installation materials Junction boxes, piping, fittings, concrete, grounding materials and similar.	1 1	37,500.00	37,500.00
60	Underground Boring Services SKU : Labor-Boring Discounted Labor for 6200ft Boring Boring by Sub Contractor Scope of work: Underground directional boring services, under pavement, including conduit	1 1	173,030.0 0	173,030.00
61	LABOR/DISC SKU : LABOR/DISC Scope of work: Installation of 14 x 12ft aluminum poles and grounding them ** Labor not included for installation of the poles on the beach. Coordination with building department for install requirements. ****	1 1	16,426.00	16,426.00
62	IT Networking and Technical Configuration Labor SKU : LABOR/IT Including: Fiber spicing and termination	1 1	33,500.00	33,500.00

#	Item & Description	Qty	Rate	Amount
63	LABOR/DISC SKU : LABOR/DISC Scope of work: Pulling of CAT5 and Fiber wire 29560 ft fiber. *** All fiber will be using existing conduits. Scope of work does not cover any repairs or replacements of existing conduit. ***	1 1	141,700.0 0	141,700.00
64	LABOR/DISC SKU : LABOR/DISC Scope of work: Mounting, connecting and positioning of 65 security cameras and Ditech Surge protectors	1 1	73,920.00	73,920.00
65	IT Networking and Technical Configuration Labor SKU : LABOR/IT Scope of work: IT configuration for entire security camera system including setup of human detection, installation of perimeter boundaries, setup of motion detection, intrusion lines and boxes, testing during day and night of each primary perimeter camera for detection and reduction of false alerts. Main MDF installation and connections for all switches, UPS, Watt Boxes, mounting of server, client monitoring stations, with 2 client computers, 4 monitors	1 1	19,850.00	19,850.00
66	LABOR/DISC SKU : LABOR/DISC A project manager will be assigned and will be accountable for allocating resources, preparing materials, monitoring progress, and keeping customer informed throughout the project lifecycle.	1 1	33,600.00	33,600.00
67	LABOR/DISC SKU : LABOR/DISC Scope of work: Training sessions will be provided over a 4 day period according to schedules necessary for all security personnel to receive proper training on the AxonNext system. Installation of all mobile apps for android and IOS devices, configuration and setup. Up to 20 devices	1 1	4,320.00	4,320.00
			Sub Total	922,275.68
			Total	\$922,275.68

Notes

Technical support remote assistance, available to you Monday through Friday between 9:00 am - 8:00 pm, Eastern Standard Time.

Ask us about our "TechProtect Gold Service Agreement". This service can be maintained up to 5 years!

Terms & Conditions

WARRANTY:

- Labor warranty covers onsite visits regarding our installation.
- Hardware warranty will repair or replace (at our option), without charge, any product proven defective in material or workmanship. The warranty period for specific product types is listed underneath each item on your estimate. "Act of God", such as lighting strike, surges, or damage caused by a third party will not be covered under warranty.

EXCLUSIONS APPLY UNLESS INDICATED ON ESTIMATE:

- If sales tax is not included in the estimate, it will be added to the invoice unless a tax-exempt certificate is provided by the customer.
- Delays in installation, due to weather conditions or changes to parts that are not caused by Techpro Security will be billed accordingly.
- Permit handling fee or any additional costs related.
- Any additional fees required by city, county, state governments for impact fees, special licensing, special permits etc, not indicated on the estimate.
- Any fees or repair costs for damage done to existing underground utilities or infrastructure
- Any modifications involving high voltage labor.
- Estimate is good for 30 days from the date of estimate.

UPON REQUEST:

An administration fee will be added to each job that requires a permit in order to cover costs such as drawings and calculations that need to be made by Techpro Security to get permits, correspondence/coordination of inspections with the city inspector, meeting inspectors on the job, etc. inspection fees levied by AHJ (authority having jurisdiction), and processing costs, if necessary, are not included in the bid price and will be billed at face value. Fees charged by AHJ for special inspections, partial inspections, or over-time inspections are not included and will be billed at face value.

Looking forward to your business!



Estimate

EST-006040

Techpro Security Products

182 Glades Rd.
Boca Raton 33432
561-922-8416

Bill To
Town of Golden Beach
1 Golden Beach Dr
Golden Beach
33160 Florida

Estimate Date : 24 Oct 2022
Reference# : A1A coverage
Account Manager : Bryan Rice

#	Item & Description	Qty	Rate	Amount
Servers and Clients				
1	AXIS Camera Station 64ch SKU : AXIS S1148 AXIS Camera Station S1148 64TB Recorder is an out-of-the-box ready rack server tested and validated with Axis products for reliable surveillance up to 4K video streams. Preconfigured and preloaded with AXIS Camera Station video management software including licenses for 48 channels plus all necessary system software. Includes 5-year limited hardware warranty, on-site hardware replacement service and keep your hard drive.	1 1	12,499.00	12,499.00
Cameras and Licenses				
2	ACAP AXIS PERIMETER DEFENDER 10 E-LICENSE Ten (10) unit e-license for AXIS Perimeter Defender, a scalable and flexible video analytics application for perimeter surveillance and protection.	1	2,989.00	2,989.00
3	ACAP AXIS PERIMETER DEFENDER 1 E-LICENSE Single unit e-license for AXIS Perimeter Defender, a scalable and flexible video analytics application for perimeter surveillance and protection.	6	299.00	1,794.00
4	AXIS P1467-LE Compact outdoor, NEMA 4X, IP66, IP67 and IK10-rated 5MP resolution, day/night, fixed bullet camera with Deep Learning Processing Unit (DLPU). Support for Forensic WDR and Lightfinder 2.0 and OptimizedIR. Varifocal 2.8-8 mm P-iris lens with remote zoom and focus. Multiple, individually configurable H.264/H.265 with Zipstream and Motion JPEG. 5MP at 25/30	42	849.00	35,658.00
5	AXIS Q6075-E Top performance PTZ camera with HDTV 1080p @60fps, 40x optical zoom, outdoor-ready, IP66, IK10 and NEMA 4x-rated. Zipstream with	2	3,299.00	6,598.00

#	Item & Description	Qty	Rate	Amount
	H.264/ H.265, Arctic Temperature Control enables operation and start up from -40 °C to +50 °C (-58 °F to 122 °F). Auto day/night functionality. Continuous 360° rotation and 220° tilt with E-flip. Shock detection, Autotracking 2, tour recording and Active Gatekeeper			
6	<p>AXIS Q1951-E 13mm</p> <p>Outdoor thermal network camera for wall and ceiling mount, 384x288 resolution, 30 fps, and 13 mm lens with 28° angle of view. It supports Electronic Image Stabilization, Zipstream, ONVIF, H.264, H.265, audio in, two supervised I/O ports and local storage. It includes Video motion detection, audio detection, shock detection and support for AXIS Camera Application Platform enabling installation of AXIS Perimeter Defender with AI-based functionality and other third-party applications.</p>	1	2,999.00	2,999.00
7	<p>AXIS Q1951-E 19mm</p> <p>Outdoor thermal network camera for wall and ceiling mount, 384x288 resolution, 30 fps, and 19 mm lens with 19.4° angle of view. It supports Electronic Image Stabilization, Zipstream, ONVIF, H.264, H.265, audio in, two supervised I/O ports and local storage. It includes Video motion detection, audio detection, shock detection and support for AXIS Camera Application Platform enabling installation of AXIS Perimeter Defender with AI-based functionality and other third-party applications.</p>	8	2,999.00	23,992.00
8	<p>AXIS Q1951-E 35mm</p> <p>Outdoor thermal network camera for wall and ceiling mount, 384x288 resolution, 30 fps, and 35 mm lens with 10.5° angle of view. It supports Electronic Image Stabilization, Zipstream, ONVIF, H.264, H.265, audio in, two supervised I/O ports and local storage. It includes Video motion detection, audio detection, shock detection and support for AXIS Camera Application Platform enabling installation of AXIS Perimeter Defender with AI-based functionality and other third-party applications.</p>	11	4,099.00	45,089.00
Network Components				
9	<p>48-Port Gigabit Ethernet L3 Switch</p> <p>S5810-48FS, 48-Port Gigabit Ethernet L3 Switch, 48 x 1Gb SFP, with 4 x 10Gb SFP+ Uplinks, Stackable Switch, Broadcom Chip</p>	1	3,330.50	3,330.50
10	<p>8-Port Gigabit Ethernet PoE+ Switch</p> <p>IES3100-8TF-P, 8-Port Gigabit Ethernet L2+ Managed Industrial PoE+ Switch, 8 x PoE+ Ports @240W, with 2 x 1/2.5Gb SFP, -40 to 75°C Operating Temperature</p>	12	463.50	5,562.00
11	<p>NDR-240-48</p> <p>240 Watt Series / 48 VDC / 5.0 Amps Industrial Single Output DIN Rail Power Supply</p>	12	159.60	1,915.20

#	Item & Description	Qty	Rate	Amount
Surge Protection				
12	WB-800-IPVM-6 WattBox 800 Series IP Power Conditioner 6 Individually Controlled & Metered Outlets	7	576.40	4,034.80
13	Ditek 24 Channel Rack Mount Surge SKU : SP-DTK-RM24NETS The DTK-WM24NETS is an 24-channel, wall mount surge protector that uses state-of-the-art circuitry to provide best-in-breed surge protection for Ethernet, PoE and optional PoE extender circuits.	1 1	1,365.40	1,365.40
14	Ditek 8 Channel Wall Mount Surge SKU : SP-DTK-WM8NETS The DTK-WM8NETS is an 8-channel, wall mount surge protector that uses state-of-the-art circuitry to provide best-in-breed surge protection for Ethernet, PoE and optional PoE extender circuits.	17 1	345.99	5,881.83
15	Ditek POE Surge Protection SKU : SP-DTK-MRJPOE The DTK-MRJPOE is a 10GbE PoE surge protector that is PoE Plus and High PoE ready. This point of use surge protector can be installed at the equipment end, or ahead of injectors and midspan devices. Its multi-stage, hybrid design provides superior protection for PoE applications.	5 1	96.40	482.00
Cable				
16	CAT5-DB-FT Cat 5E Direct Burial By The Foot	20,000 1	0.30	6,000.00
17	3ft CAT5 Prefabricated Patch Cable 3ft Patch Cable	150	5.00	750.00
18	3ft Fiber Patch Cable FIBER-1MP-10GB	42	24.50	1,029.00
Misc Accessories				
19	AXIS T91B47	29	429.00	12,441.00
20	AXIS T94F01M	29	39.00	1,131.00
21	AXIS T94V01C	29	109.00	3,161.00
22	AXIS T91E61 Wall Mount SKU : AXIS T91E61 Wall Mount	29 1	49.00	1,421.00
23	AXIS TQ1602-E Conduit Back Box SKU : AXIS TQ1602-E	4 1	159.00	636.00

#	Item & Description	Qty	Rate	Amount
	Outdoor-ready, impact resistant (IK10+) back box with sealed compartment (IP66/67) for secure storage of connectivity devices. 3 /4" / M25 conduit interface from both side and back. Can be mounted directly behind a wide range of Axis network cameras. Includes a network cable and extra gaskets. Specifically designed for aesthetically pleasing installations with AXIS Q17/Q19 and P14 Camera Series			
24	AXIS T91F67	2	149.00	298.00
25	AXIS T91K61	2	429.00	858.00
26	22 Foot Concrete POLE 22 Type 1 - SU POLE with pre drilled holes Wind-Load Analysis included	5	3,050.00	15,250.00
27	NEMA-LARGE/O SKU : NEMA-LARGE/O NEMA 3R Rainproof Hinge Cover Wall-Mount Enclosure, Includes Mounting Board, Carbon Steel, Large, With back panel 30" x 24" x 8"	6 1	799.00	4,794.00
28	RJ45 Connector SKU : tool-wb-rj45(1) RJ 45 connector for cat5e cable	150	0.75	112.50
29	WD Purple 128GB Surveillance microSD card SKU : SD-P128	64 1	63.95	4,092.80
30	1GB SFP For Switch SFP1G-LX-31	14	29.95	419.30
31	Patch Panel TC-KP24	1	35.95	35.95
32	Cat6 Keystone TC-K25C6	26	59.50	1,547.00
Materials & Labor				
33	Installation Materials SKU : MATERIALS Installation materials Junction boxes, piping, fittings, concrete, grounding materials and similar.	1 1	15,700.00	15,700.00
34	Lift Rental SKU : LIFT Estimated monthly lift rental. Actual cost may differ and cost will be reflected on final invoice.	1 1	10,000.00	10,000.00

#	Item & Description	Qty	Rate	Amount
35	Underground Boring Services SKU : Labor-Boring Discounted Labor for 470ft Boring Boring by Sub Contractor Scope of work: Underground directional boring services, under pavement, including conduit	1 1	56,220.20	56,220.20
36	Electrical Services SKU : Labor-Electrical High Voltage electrical services on all the IDF and MDF locations and also emergency power setup	1 1	12,500.00	12,500.00
37	LABOR/DISC SKU : LABOR/DISC A project manager will be assigned and will be accountable for allocating resources, preparing materials, monitoring progress, and keeping customer informed throughout the project lifecycle.	1 1	17,600.00	17,600.00
38	LABOR/DISC SKU : LABOR/DISC Scope of work: Installation of 5 x 22ft concrete poles and grounding them	1 1	17,500.00	17,500.00
39	IT Networking and Technical Configuration Labor SKU : LABOR/IT Including: Fiber spicing and termination	1 1	7,640.00	7,640.00
40	LABOR/DISC SKU : LABOR/DISC Scope of work: Pulling of CAT5 and Fiber wire	1 1	16,880.00	16,880.00
41	LABOR/DISC SKU : LABOR/DISC Scope of work: Mounting, connecting and positioning of 64 security cameras and Ditech Surge protectors	1 1	27,600.00	27,600.00
42	IT Networking and Technical Configuration Labor SKU : LABOR/IT Scope of work: IT configuration for entire security camera system including setup of human detection, installation of perimeter boundaries, setup of motion detection, intrusion lines and boxes, testing during day and night of each primary perimeter camera for detection and reduction of false alerts.	1 1	21,870.00	21,870.00
			Sub Total	411,676.48
			Total	\$411,676.48

Notes

Technical support remote assistance, available to you Monday through Friday between 9:00 am - 8:00 pm, Eastern Standard Time.

Ask us about our "TechProtect Gold Service Agreement". This service can be maintained up to 5 years!

Terms & Conditions

WARRANTY:

- Labor warranty covers onsite visits regarding our installation.
- Hardware warranty will repair or replace (at our option), without charge, any product proven defective in material or workmanship. The warranty period for specific product types is listed underneath each item on your estimate. "Act of God", such as lighting strike, surges, or damage caused by a third party will not be covered under warranty.

EXCLUSIONS APPLY UNLESS INDICATED ON ESTIMATE:

- If sales tax is not included in the estimate, it will be added to the invoice unless a tax-exempt certificate is provided by the customer.
- Delays in installation, due to weather conditions or changes to parts that are not caused by Techpro Security will be billed accordingly.
- Permit handling fee or any additional costs related.
- Any additional fees required by city, county, state governments for impact fees, special licensing, special permits etc, not indicated on the estimate.
- Any fees or repair costs for damage done to existing underground utilities or infrastructure
- Any modifications involving high voltage labor.
- Estimate is good for 30 days from the date of estimate.

UPON REQUEST:

An administration fee will be added to each job that requires a permit in order to cover costs such as drawings and calculations that need to be made by Techpro Security to get permits, correspondence/coordination of inspections with the city inspector, meeting inspectors on the job, etc. inspection fees levied by AHJ (authority having jurisdiction), and processing costs, if necessary, are not included in the bid price and will be billed at face value. Fees charged by AHJ for special inspections, partial inspections, or over-time inspections are not included and will be billed at face value.

Looking forward to your business!

LOW VOLTAGE SYSTEMS

City Wide Surveillance System Upgrade

Town of Golden Beach

1 Golden Beach Drive,
Golden Beach, FL 33160

Revision: 1
Modified: 8/11/2022
Project No: 2022-0802



Presented By:

Interlink Group Professional Services, Inc.

7825 NW 29th Street
Suite 113
Doral, Florida 33122 USA
305 591 9661
<http://www.interlinkgroup.net/>



<http://www.interlinkgroup.net/>

COMPANY PROFILE

Introduction

Interlink Group provides a wide array of design-build construction services for the telecom & security industries. Connectivity solutions consist of fiber optic and copper cabling, wireless solutions, CATV, security and various building automation services. We employ RCDD, PE and CAD technicians to service your project. Whether it's Voice & Data cabling, an IP network, CCTV system, Wi-Fi or in-building DAS, energy management, or building automation, think of Interlink Group for information transport infrastructure design and installation services.

Our vertical markets service transportation, education, banking, telecomm and government construction services as well as developers engaged in mixed use mid and high-rise corporate facilities, hotels and condominiums.

About Interlink

Interlink Group Professional Services (IGPS) is a corporation organized under the laws of the State of Florida Department of State. Incorporated in May of 2010, IGPS holds the status of a Women Owned Minority Business Enterprise, and is classified under the Federal Government SBA as a small emerging business enterprise.

Interlink Group engages in the profession of design/manage, design-build, or hard bid telecomm installation projects. Build or design-build with emphasis on medium projects less than 2M. Project management of medium to large projects 5M.

Interlink Group covers the state of Florida area for small to large projects. MAC work (Moves, additions, and changes) are done only in the South Florida area which consists of Miami-Dade, Broward, Palm Beach, and Monroe counties. Large projects are on a national footprint.

Interlink Group is registered with the Central Contractor Registration (CCR) Database and with the SBA as a small business enterprise.

DUNS: 962686536

CAGE: 619A7

NAICS: 238210, 541330, 541340, 541490

FL State License: ES0000303

BICSI Registration: 121767

INTRODUCTION:

Interlink Group has partnered with AXIS Communications and Qognify to provide a state-of-the-art IP Video Management Solution (VMS) that incorporates artificial intelligence (AI) and machine learning to automate and detect security vulnerabilities and threats within the Town of Golden Beach.

AXIS Communications and Qognify have a long-standing relationship with Interlink and are a well-known vendor in the Security Surveillance world as best-in-class manufacturer of Video IP cameras and incident management systems for law enforcement, utility, transportation and commercial environments. The world's most interoperable security platform that unifies video forensics, data capture, incident management, visual messaging, and emergency notification into ONE efficient solution.

Solutions for Town of Golden Beach:

Here is a brief overview of our solution for the Town of Golden Beach. The current system has reached obsolescence exceeding its useful life and requires technology as well as equipment replacement. Much has changed in the last Ten (10) years since the original system was installed back in 2012.

The initial basic system shall be capable of implementing the first Six items below, with future capabilities to expand services on one cohesive platform.

- A. Video Management; real time recording and archiving.
- B. Situational Awareness; facilitate immediate action to events.
- C. Actionable Intelligence; Extract relevant information from video data.
- D. Central Operations Management; Workflow Support for Substation.
- E. Real-time Notifications; email, messaging and screen alerts.
- F. Video Analytics; Cross Line detection, motion, facial recognition, etc.
- G. Video Analytics; Machine Learning non-rules-based AI (Optional Plug-In)
- H. Access Control System Expansion; Pedestrian Gates

The above list is further described in the paragraphs to follow

SCOPE OF WORK NARRATIVE:

We have used the following in our preparation of this proposal; Original design drawings from IronSky and Interlink Group, titled 'Security Cameras and LPR System' dated 11th June 2012. Interlink Group has also used a job-site walk-through conducted on Friday July 29th 2022 with our electrical, directional boring and security engineers as well as a conference call with Qognify sales engineers to create a proposal with the following qualifications and exclusions.

Solutions for Town of Golden Beach:

Interlink Group has engineered the following migration to a new system broken down into three phases of

Scope of Work

implementation.

PHASE 1: Existing Equipment Replacement.

PHASE 2: Additional Cameras in strategic locations.

PHASE 3: Migration of VMS and implementation of analytics.

PHASE ONE:

The first phase of the upgrade will be to replace existing equipment located throughout the Town. The ethernet switch, power supply, power injector for cameras, and patch cords inside the existing enclosures as well as the camera unit itself. Some locations directly on the beach front at the ocean edge will have camera units that will now have stainless steel housings. Most notable changes are the old AXIS cross line detection (CLD) locations on the beach and Intercoastal Waterways (ICW). These locations shall be replaced with *Multi-Spectral* camera units that contain IR thermal imaging as well as 4K video sensors. In addition, high traffic locations such as intersections that only have a single PTZ unit will now have 360° panoramic 20MP units such as the AXIS Q6100 -E with the addition of a bottom mounted laser focus PTZ. All this to add total situational awareness and eliminate blind spots inherent in the old design.

A. EQUIPMENT REPLACEMENT.

The following network and power equipment will need to be replaced at all of the NEMA-3R cabinets located throughout the Town. These are the black polycarbonate Fiberglass enclosures located at the base of each camera pole.

Line#	Equipment description	Model Number	Comments
1	Signamax, POE+ Switch, 8-port	I30040	Includes 2x SFP SM, Managed
2	Meanwell Power Supply, 240w, DIN	NDR-240-48	DIN Rail Mounted, 48VDC
3	AXIS Power Injector, 60w		As required per Camera
4	Fiber Optic Patch Cable(s)		LC-LC SM Duplex 1m

B. CAMERA REPLACEMENT.

The following IP camera equipment shall be used during the upgrade process.

Line#	Equipment description	Model number	Comments
1	AXIS PTZ HDTV 1080p	P5655-E	1080p with Laser Focus
2	AXIS PTZ Stainless Steel 1080p	Q6075-E	1080p SS Environmental Unit
3	AXIS Dome 5MP w/ IR	P3267-LVE	5MP
4	AXIS Box 5MP	P1377-LE	5MP w/ CLD
5	AXIS 360 Panoramic w/PTZ	Q6100-E	20MP 360 4 camera unit
6	AXIS PTZ Laser Focus	Q6128-E	Fits Q6100-E above
7	FLIR FH-Series Multi-spectral	FH-644 ID	IR plus 4K Video

Scope of Work

C. CAMERA REPLACEMENT.

The following master list show's locations that are slated for equipment upgrades;

Loc#	Location Name	Old Equip.	New Equip.	Comments
L1-1	Beach North	Q6054-E	Q6075-E SS	Stainless 1080p PTZ
L1-2	Beach North CLD	P1365MK2	FH-644 ID	IR plus 4K Video
L4	Singer Park	Q6034-E	P5655-E	1080p PTZ
L5	Massini Park	Q6034-E	Q6100-E+Q6128-E	360 Panorama w/PTZ
L6-1	ICW North PTZ	Q6034-E	P5655-E	1080p PTZ
L6-2	ICW North CLD	P3364-E	FH-644 ID	IR plus 4K Video
L6-3	ICW North Condo	P3364-E	P3267-LVE	5MP dome
L7-1	LPR Ocean Ave North 1	P3364-E	P3267-LVE	5MP dome
L7-2	LPR Ocean Ave North 2	P3364-E	P3267-LVE	5MP dome
L8	North Island No. Cam	Q6034-E	P5655-E	1080p PTZ
L9	Pedestrian Gate Navona	P1346-E	P1377-LE	5MP Box w/CLD
L10	Golden Beach Navona	Q6034-E	Q6100-E+Q6128-E	360 Panorama w/PTZ
L11	North Island So. Cam	Q6034-E	P5655-E	1080p PTZ
L12	Pedestrian Gate Palermo	P1346-E	P1377-LE	5MP Box w/CLD
L13	North Park	Q6034-E	Q6100-E+Q6128-E	360 Panorama w/PTZ
L14	Parkway North	Q6034-E	P5655-E	1080p PTZ
L15-1	Beach Center	Q6034-E	Q6075-E SS	Stainless 1080p PTZ
L15-2	Beach Center CLD	P3364-E	FH-644 ID	IR plus 4K Video
L16-1	Beach Men's Restroom	P3225-LVE MKII	N/A	<i>Cameras 4 years old</i>
L16-2	Beach Ladies Restroom	P3225-LVE MKII	N/A	<i>Not needing Upgrade</i>
L16-3	Beach Showers	P3225-LVE MKII	N/A	
L16-4	Beach Water Sports Storage	P3225-LVE MKII	N/A	
L17-1	Beach Pavilion	P3225-LVE MKII	N/A	
L17-2	Beach Pavilion PTZ	Q6054-E MKII	N/A	
L17-3	Beach Parking Lot Entrance	P3225-LVE MKII	N/A	
L17-4	Beach Parking Lot Exit	P3225-LVE MKII	N/A	
L18	Golden Beach Strand	Q6034-E	Q6100-E+Q6128-E	360 Panorama w/PTZ
L19	Center Island No. Cam	Q6034-E	P5655-E	1080p PTZ
L20-1	ICW Strand Dock	Q6034-E	P5655-E	1080p PTZ
L20-2	ICW Strand Dock CLD	P3364-E	FH-644 ID	IR plus 4K Video
L21	Center Island So. Cam	Q6034-E	P5655-E	1080p PTZ

Scope of Work

L22	Pedestrian Gate Ravena	P1346-E	P1377-LE	5MP Box w/CLD
L23	South Park	Q6034-E	Q6100-E+Q6128-E	360 Panorama w/PTZ
L24	Parkway South	Q6034-E	P5655-E	1080p PTZ
L25	South Island No. Cam	Q6034-E	P5655-E	1080p PTZ
L26	Pedestrian Gate Verona	P1346-E	P1377-LE	5MP Box w/CLD
L27	Golden Beach Verona	Q6034-E	Q6100-E+Q6128-E	360 Panorama w/PTZ
L28	South Island So. Cam	Q6034-E	P5655-E	1080p PTZ
L29-1	Beach South	Q6034-E	Q6075-E SS	Stainless 1080p PTZ
L29-2	Beach South CLD	P1347-E	FH-644 ID	IR plus 4K Video
L30-1	LPR Ocean Ave South 1	P3364-E	P3267-LVE	5MP dome
L30-2	LPR Ocean Ave South 2	P3364-E	P3267-LVE	5MP dome
L31	Tweddle SE Corner	Q6034-E	P5655-E	1080p PTZ
L32	Tweddle Tennis Court	Q6035-E	P5655-E	1080p PTZ
L33-1	Tweddle Playground West	P3225-LVE MKII	N/A	<i>Cameras 4 years old</i>
L33-2	Tweddle Playground East	P3225-LVE MKII	N/A	<i>Not needing Upgrade</i>
L33-3	Tweddle Pavilion	P3225-LVE MKII	N/A	
L35	Pedestrian Gate South	P1346-E	P1377-LE	5MP Box w/CLD
L36-1	Police Dept/TH Analog 4-CH	Analog	N/A	<i>These cameras are being</i>
L36-2	Police Dept/TH Analog 4-CH	Analog	N/A	<i>Retired upon move to CH</i>
L37-1	ICW South	Q6034-E	P5655-E	1080p PTZ
L37-2	ICW South CLD	P3364-E	FH-644 ID	IR plus 4K Video
L38	South Gate Entrance	M3024-L	N/A	<i>Cameras 5 years old</i>
L39	South Gate Exit	M3024-L	N/A	<i>Not needing Upgrade</i>
L40	West Lot Entrance	P3375-LVE	N/A	
L41	Strand Visitor Face	P3375-LVE	N/A	
L42	Strand Visitor LPR	Q1765-LE	N/A	
L43	Strand Resident Face	P3375-LVE	N/A	
L44	Strand Resident LPR	Q1765-LE	N/A	
L45	Strand Exit No Face	P3375-LVE	N/A	
L46	Strand Exit No LPR	Q1765-LE	N/A	
L47	Strand Exit So Face	P3375-LVE	N/A	
L48	Strand Exit So LPR	Q1765-LE	N/A	
L49	Strand West Entrance	P3375-LVE	N/A	
L50	Strand West Exit	P3375-LVE	N/A	
L51	Annex Storage Bay	M3044-V	N/A	
L52	Annex Evidence Room	M3044-V	N/A	

Scope of Work

L53	Annex Entrance North	P3225-LVE MKII	N/A	
L54	PW Yard South	P3225-LVE MKII	N/A	
L55	Strand PTZ East	Q6054-E MKII	P5655-E	1080p PTZ

PHASE TWO:

The second phase of the upgrade will be to add camera equipment to locations that have not had coverage and/or have blind spots. These areas are the ocean beach front North and South of the Beach Pavilion, State Road A1A along the corridor North and South of The Strand entrance, the Island bridge roads, with views looking East over the bridge as well as North and South on Island Road. Lastly along the intercoastal waterway to detect intruders during nighttime hours.

A. OCEAN BEACH CAMERAS.

Along the ocean corridor Interlink has strategically placed Four (4) new camera pole locations that will house Two (2) Multi-spectral camera units on each pole. One will view North the other South. Each multi-spectral camera (a.k.a. IR or FLIR) will contain one infrared sensor plus one 4K visible light sensor in color. This allows the police staff to be able to view both a heatmap of images in total darkness plus the ability to also view full video in minimal low light conditions.

The placement of each of the four poles shall align with camera / fiber optic equipment that is located on the streets of Navona, Palermo, Ravenna, and Verona, thus dividing the beach area into four quads. In an effort to provide power and communications to these remote beach locations, Interlink Group shall deploy Corning Cable Systems powered fiber and equipment. Conduit shall be installed between the property owners' houses that lie directly in line with these streets mentioned above. The method of placement will be via directional bore from the camera poles on the above streets to the beach pole location, where a new handhole shall be placed right outside of the property line of the resident.

Interlink Group will need the Town Manager to secure permission from each property owner to be able to place underground conduits between the properties as well as permission to place poles in these areas. Each resident can be assured that these IR cameras will not be positioned to view any part of their home to invade their privacy. *Please refer to included aerial view of camera placements.*

B. STATE ROAD A1A CAMERAS.

These locations shall be strategically placed along the boulevard to cover blind spots North from The Strand to County Line Road, and the South from The Strand to Sunny Isles Beach. They will complement the existing cameras located to the North and South A1A medians. There will be a total of Four (4) poles containing Two (2) cameras each.

Scope of Work

The placement of each of the four poles shall align with camera / fiber optic equipment that is located on the streets of Navona, Palermo, Ravena, and Verona, thus dividing the A1A Boulevard area into four quads, with equidistant from the Strand North as well as The Strand South. In an effort to provide power and communications to these remote median locations, Interlink Group shall deploy Corning Cable Systems powered fiber and equipment. *Please refer to included aerial view of camera placements.*

C. ISLAND BRIDGE CAMERAS.

These locations shall be strategically placed at the West end of Navona, The Strand, and Verona to cover blind spots along each island bridge and North and South on Island Road. A total of Three (3) camera poles, each with a 360-degree camera, North, Center and South islands shall receive One (1) pole each. The existing sign pole shall be replaced with a taller pole that will accommodate existing signage as well as the new camera at the top of the pole.

Power for these locations shall use the same system as the other camera pole locations. Each new NEMA-3R enclosure shall be tied into the exiting FPL street light luminaire. *Please refer to included aerial view of camera placements.*

D. INTERCOASTAL WATERWAY CAMERAS.

These cameras shall be strategically placed at current pole locations on the South end at Terracina (L37), center island marina (L20), and north end at condominium (L06). All three locations shall utilize the Multi-Spectral IR thermal and 4K video sensor cameras to detect unauthorized movement in these areas after hours. Both North and South poles will have one FLIR FH 644 ID camera, while the center island marina will have Two (2) units, one North, the other South to cover movement toward the islands.

In addition, two (2) new pole locations shall be co-located at the west side of the owner's property on Parkway South and Parkway North to accommodate multi-Spectral units at the ICW in this area. Ideally the pole shall be placed between the property line of 298 South Parkway and 498 North Parkway addresses. The intent here would be to create a thermal barrier that would be able to detect intrusion anytime of day alerting the substation of activity in these areas. It will also allow situational awareness by the utilization of multi-spectral cameras that have 4K video as well as thermal image sensors.

Please refer to included aerial view of camera placements.

D. NEW CAMERA LISTING.

The following list show's proposed locations that are to be added to the camera listing for coverage throughout the town. This listing does not include existing camera locations that will be upgraded to newer technologies replacing a camera unit. Please refer to previous matrix for these items.

Scope of Work

Loc#	Location Name	New Equip.	Comments
L15-3	Beach Center IR South	FH644 ID	Multi-Spectral IR+4K Video
L20-3	ICW Strand Marina	FH644 ID	Multi-Spectral IR+4K Video
L76	South Island Bridge	Q6100-E+Q6128-E	360 Panorama w/PTZ
L77	Center Island Bridge	Q6100-E+Q6128-E	360 Panorama w/PTZ
L78	North Island Bridge	Q6100-E+Q6128-E	360 Panorama w/PTZ
L79	South Parkway	FH644 ID	Multi-Spectral IR+4K Video
L80	North Parkway	FH644 ID	Multi-Spectral IR+4K Video
L81-1	AIA Verona SB	P3267-LVE	5MP dome
L81-2	AIA Verona NB	P3267-LVE	5MP dome
L82-1	AIA Ravenna SB	P3267-LVE	5MP dome
L82-2	AIA Ravenna NB	P3267-LVE	5MP dome
L83-1	AIA Palermo SB	P3267-LVE	5MP dome
L83-2	AIA Palermo NB	P3267-LVE	5MP dome
L84-1	AIA Navona SB	P3267-LVE	5MP dome
L84-2	AIA Navona NB	P3267-LVE	5MP dome
L91-1	Beach IR Verona So	FH644 ID	Multi-Spectral IR+4K Video
L91-2	Beach IR Verona No	FH644 ID	Multi-Spectral IR+4K Video
L92-1	Beach IR Ravenna So	FH644 ID	Multi-Spectral IR+4K Video
L92-2	Beach IR Ravenna No	FH644 ID	Multi-Spectral IR+4K Video
L93-1	Beach IR Palermo So	FH644 ID	Multi-Spectral IR+4K Video
L93-2	Beach IR Palermo No	FH644 ID	Multi-Spectral IR+4K Video
L94-1	Beach IR Navona So	FH644 ID	Multi-Spectral IR+4K Video
L94-2	Beach IR Navona No	FH644 ID	Multi-Spectral IR+4K Video

F. NEW PEDESTRIAN GATES.

The following list show's new pedestrian gates that shall be added to the existing Tyco Kantech access control system. The Six (6) gates currently have new Fiber Optic cabling that has been added by Hotwire Communications. Interlink Group shall install new NEMA-3R enclosures at each gate for access control hardware, connectivity and card readers.

Interlink shall program the existing Kantech Entrapass® software with the Six (6) new locations below and setup access levels for Town staff as well as residents.

Line#	Location description	Locale	Comments
1	Massini Pedestrian Gate	North County Line Road	Need Gate/locking Hardware

Scope of Work

2	Navona Pedestrian Gate	A1A	Add electric strike & plate
3	Palermo Pedestrian Gate	A1A	Add electric strike & plate
4	Revenna Pedestrian Gate	A1A	Add electric strike & plate
5	Verona Pedestrian Gate	A1A	Add electric strike & plate
6	Terracina Pedestrian Gate	195 th Street	Add electric strike & plate

PHASE THREE:

The third phase of the upgrade will be to setup and deploy the new video system with analytics, AI and incident management as well as train the staff on operation and maintenance of the command center. We purposely have this topic last in the tasks as to not have the video system down more than necessary as we transition the Town of Golden Beach Police Department to the new interface.

The first major milestone in PHASE THREE is to setup and deploy the new Video Management System on the servers and command center at the substation. This will be accomplished alongside the current system as to have minimal downtime during the migration to the enhanced platform.

As one of the world's leading physical security solution providers, Qognify has been developing advanced video management solutions for over 20 years. Qognify VMS is the latest result of these development efforts, exceeding the traditional scope of using video technology to provide safety and security by supporting business operations and creating added value. Qognify VMS is designed to meet the specific needs of enterprise organizations around the globe. It is based on field-proven technology elements, which are used by many customers in thousands of projects worldwide. Thanks to its open architecture, it enables advanced integrations with a wide variety of 3rd party systems to maximize the outcomes of your physical security ecosystem.

www.qognify.com

VIDEO MANAGEMENT; The video management interface shall contain a simplified screen that will allow information and alerts to flow down to substation staff without having to view all of the cameras on each screen. When there is more than 20 video streams it's virtually impossible to have them monitored 24/7 by substation staff without missing key information on intrusions, trespass, or accident issues.

Scope of Work



SITUATIONAL AWARENESS; This is achieved by the use of video management console, event and alerts screen listing as well as maps of the Town of Golden Beach along with camera positions that will show active alert status when an event has occurred.

Scope of Work



VIDEO ANALYTICS INTERFACE; In the integration of video analysis functions, Qognify relies on a modular approach that combines maximum flexibility with in-depth integration.

This is facilitated by the Qognify Analytics Interface (QAI) – a standard interface that can be connected to plug-ins with video analysis applications from numerous manufacturers. This connection can be used to transmit not only alarm events but also metadata and rules to Qognify VMS and visualize them there. The QAI permits the use of camera based, server based and cloud-based analysis algorithms.

Using third party analytics as a plugin to the Qognify VMS, you will be able to detect events automatically by using the following products from BriefCam Ltd or Active Intelligence Corp.

BriefCam® is the industry's leading provider of VIDEO SYNOPSIS® technology for rapid video review and search, real-time alerting and quantitative video insights. Quickly search and filter objects and events of interest by men, women, children, vehicles, proximity identification and lighting changes with speed and precision, using 28 classes and attributes, in addition to face recognition, license plate recognition, appearance similarity, color, size, speed, path, direction, and dwell time, providing an ever increasing and powerful set of distinct search combinations. BriefCam's unmatched detection and extraction accuracy dramatically improves post-event investigation productivity by pinpointing people and objects of interest with speed and precision. In addition, by presenting objects that have appeared at different times within the video simultaneously, BriefCam VIDEO SYNOPSIS® enables the review of hours of video in minutes, dramatically increasing investigation productivity.

[Law Enforcement Video Content Analytics for Law Enforcement | BriefCam](#)

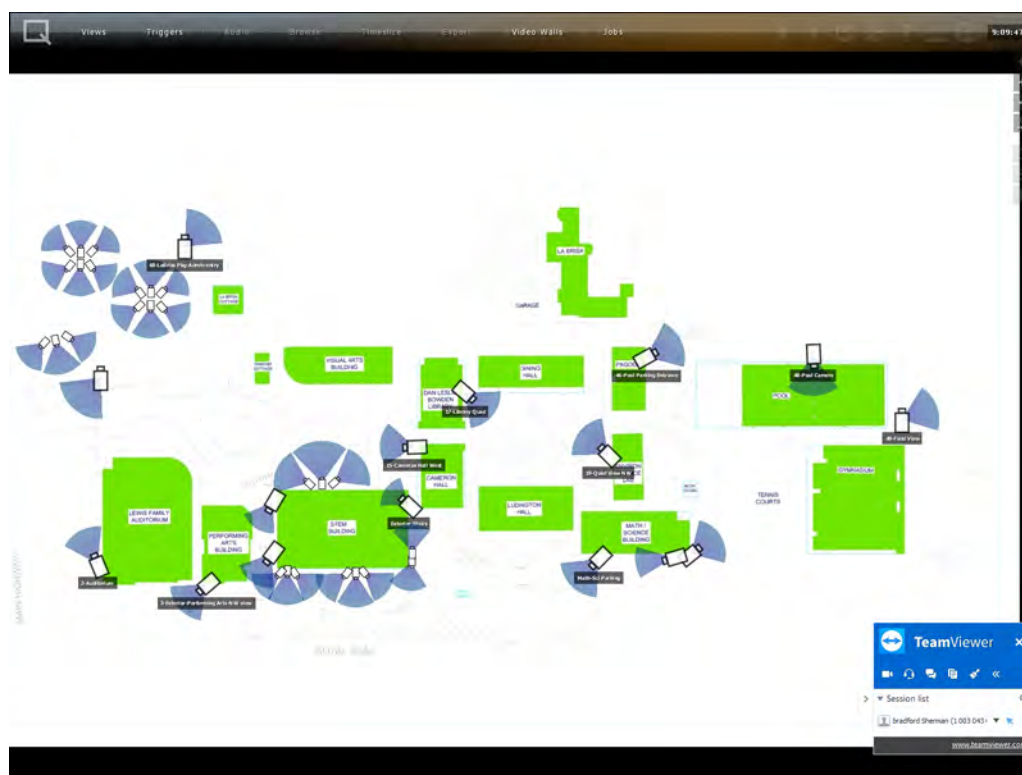
ASTRA is AI at its finest. It uses machine learning to detect and learn what "Normal" looks like. When an anomaly occurs the interface can then alert the substation staff that an incident occurred, at a particular location. ASTRA

Scope of Work

resides on a separate server to not take away resources from the VMS recorder. It is seamless to the operator and works behind the scenes to analyze all video streams. www.activeintelligencecorp.com

The analytics for 100 cameras in the system that are public facing will be \$25.00 per camera, per month billable per quarter. This will equate to approximately \$2,500 per month.

MAPS VIEW INTERFACE; The maps interface will be setup to show the complete layout of the Town of Golden Beach along with buildings and facilities. Each building will become a separate page on the screen after a drill down click of the mouse. The operator in the substation can then click on a particular camera location to bring it up full size on the screen. For outdoor camera locations, the maps will depict icons on the screen at the camera location. An operator can click on the icon to display the video. During an abnormal event, the screen will pop up with the video that contains the location of the abnormal event. Events can be programmed for movement, accident.



Sample Maps Screen Layout

Scope of Work

TRAINING SESSIONS;

Interlink will host multiple training sessions for the substation staff in the operation and investigative capabilities of video analytics. Training sessions shall be held over a period of two weeks at durations of 2 hours each. Staff in attendance should be 4-5 individuals at one given time. The smaller the class the better training experience.

SUB-CONTRACTOR ALLOWANCES;

Interlink has secured subcontract pricing for scope of work items that Interlink Group does not self-perform. Mainly electrical work, directional boring and pole erecting / signage replacement. The following is a listing of our subcontractors and the allowance we are carrying;

1. Electrical Subcontractor
 - a. Hypower Inc. \$ 58,645.
2. Directional Boring Subcontractor
 - a. M&P Underground \$ 83,928.
3. Signage Poles and Signs
 - a. GraphPlex Signs \$ 29,000.

Caveats & exclusions:

- All existing CCTV pole locations shall have the current camera equipment changed out to an upgraded model that has greater pixel density and/or replaced with a video unit that exceeds the current usage. i.e.; Intersections will receive 360-degree camera coverage instead of the old PTZ unit.
- The current industrial Ethernet switches, power supplies and power injectors located in the remote NEMA cabinets at each CCTV pole location require equipment upgrades. The equipment costs are captured in this proposal. All new internal devices shall be installed to replace the aging equipment that exhibits deterioration from the elements and salt air environment.
- Permission from property owners of Ocean Drive lots will be needed to approve the placement of a camera pole on the East side of their property and the subterranean passage of fiber optic cabling and power under the fence line of homes. The Town of Golden Beach to secure permissions.
- The Right-of-Way (ROW) permits needed from FDOT and their associated costs to cross A1A with fiber for the beach camera pole locations is not included in this proposal. Actual costs will be invoiced as a 'Pass Through' to the Town when quantified.
- Access control at all of the pedestrian gates currently have fiber optic cabling installed by Hotwire. Each of these locations will need electrical power to operate equipment's such as locking mechanisms, card

Scope of Work

readers and controller boards. There are no provisions in this proposal for electrical work or new gate hardware at these locations. It is the responsibility of the Town to provide a gate hardware vendor that will work with Interlink to modify and/or replace gates to accommodate new locking and access equipment.

- Any MOT required in Town or on A1A will be provided by Golden Beach Police Department during normal business hours.
- Building permits for electrical, low voltage and civil work (Other than FDOT ROW) if required for directional boring across local streets and easements are excluded and assumed that they will be a 'No-Cost' permit to Interlink Group.

Existing fiber optic backbone system is in the process of being upgraded by HOTWIRE COMMUNICATIONS and will be utilized for the new system. The new FO backbone network should be single-mode OS2 and support 10G-40G network throughput.

PROJECT DELIVERABLES NARRATIVE:

The following items are included as part of this project. This list is not all inclusive and may include other items outlined in the scope and/or contractual terms of the project.

1. Weekly project management reports verbal and/or written giving project status to owner/GC/Architect.
2. Complete 'As-Built' drawings to accurately depict field conditions and installation. As build drawings shall consist of Two (2) hard copy sets of 24x36 drawings as well as a digital copy in AutoCAD and Adobe PDF.
3. Final permit inspections as required by the AHJ (if applicable).
4. Final Quality Assurance (QA) review to include project evaluations.
5. Test results of performance certifications, copper and fiber, for all cable plant. Results shall be provided for in hard copy as well as digital format.
6. Photographic documentation for customer reference and project files.
7. Programming documentation as it pertains to device setup.
8. End user training sessions for management and operations personnel.
9. Warranty Letter describing manufacturer's responsibility toward equipment.
10. Maintenance Agreement describing terms & conditions of extended warranty policy.

PROPOSAL SUMMARY

City Wide Surveillance System Upgrade

Town of Golden Beach

1 Golden Beach Drive,
Golden Beach, FL 33160

Revision: 1
Modified: 8/11/2022

Presented By:

Interlink Group Professional Services, Inc.

7825 NW 29th Street
Suite 113
Doral, Florida 33122 USA
305 591 9661
<http://www.interlinkgroup.net/>



Location	Installed Price
Existing Locations: L01 North Beach	\$14,960.62
Existing Locations: L04 GB Dr @ Singer Park	\$3,031.95
Existing Locations: L05 Massini st	\$6,130.72
Existing Locations: L06 Golden Bay Towers	\$13,079.37
Existing Locations: L07 A1A North	\$2,554.57
Existing Locations: L08 No Island North	\$3,031.95
Existing Locations: L09 Navona Pedestrian Gate	\$6,137.19
Existing Locations: L10 GB Dr @ Navona	\$6,130.72
Existing Locations: L11 No Island South	\$3,031.95
Existing Locations: L12 Palermo Pedestrian gate	\$6,137.19
Existing Locations: L13 No Park	\$6,130.72
Existing Locations: L14 No Park Cul Desac	\$3,031.95

City Wide Surveillance System Upgrade

Project No : 2022-0802

Rev. 1

8/11/2022

Location	Installed Price
Existing Locations: L15 Beach Center	\$5,366.88
Existing Locations: L16 Beach Pavilion	\$549.07
Existing Locations: L17 Strand Substation	\$549.07
Existing Locations: L18 GB Dr & Strand	\$6,130.72
Existing Locations: L19 Ctr Island North	\$3,031.95
Existing Locations: L20 Marina	\$12,076.62
Existing Locations: L21 Ctr Island South	\$3,031.95
Existing Locations: L22 Revenna Pedestrian Gate	\$6,137.19
Existing Locations: L23 So Park	\$6,130.72
Existing Locations: L24 So Park Cul Desac	\$3,031.95
Existing Locations: L25 So Island North	\$3,031.95
Existing Locations: L26 Verona Pedestrian Gate	\$6,137.19
Existing Locations: L27 GB Dr @ Verona	\$6,130.72
Existing Locations: L28 So Island South	\$3,031.95
Existing Locations: L29 South Beach	\$14,960.62
Existing Locations: L30 A1A South	\$2,554.57
Existing Locations: L31 Basketball Court / New TH	\$3,031.95
Existing Locations: L32 Tennis Courts	\$3,031.95
Existing Locations: L33 Tweedle Park	\$549.07
Existing Locations: L35 Terracina Ave	\$1,708.83
Existing Locations: L36 Police Annex	\$549.07
Existing Locations: L37 ICW South	\$12,076.62
Existing Locations: L55 Strand	\$2,482.88

City Wide Surveillance System Upgrade

Project No : 2022-0802

Rev. 1

8/11/2022

Location	Installed Price
New Camera Locations: L15 Beach Center	\$18,638.41
New Camera Locations: L20 ICW Strand Marina	\$9,593.74
New Camera Locations: L76 South Island Bridge	\$7,263.90
New Camera Locations: L77 Center Island Bridge	\$7,263.90
New Camera Locations: L78 North Island Bridge	\$7,263.90
New Camera Locations: L79 South Parkway	\$21,503.85
New Camera Locations: L80 North Parkway	\$21,503.85
New Camera Locations: L81 A1A @ Verona	\$5,174.76
New Camera Locations: L82 A1A @ Ravenna	\$5,174.76
New Camera Locations: L83 A1A @ Palermo	\$5,174.76
New Camera Locations: L84 A1A @ Navona	\$5,174.76
New Camera Locations: L91 Beach IR Verona	\$21,503.85
New Camera Locations: L92 Beach IR Ravenna	\$21,503.85
New Camera Locations: L93 Beach IR Palermo	\$21,503.85
New Camera Locations: L94 Beach IR Navona	\$21,503.85
Pedestrian Gates: Massina Gate	\$4,849.73
Pedestrian Gates: Verona Gate	\$4,873.73
Pedestrian Gates: Ravenna Gate	\$4,873.73
Pedestrian Gates: Palermo Gate	\$4,873.73
Pedestrian Gates: Navona Gate	\$4,873.73
Pedestrian Gates: Teracina Gate	\$4,873.73
VMS Software	\$56,470.50
VMS Server	\$27,287.13

City Wide Surveillance System Upgrade

Project No : 2022-0802

Rev. 1

8/11/2022

Location	Installed Price
AI Software	\$17,382.00
AI Server	\$9,095.71
Sub-Directional Boring	\$83,927.79
Sub-Sign Poles	\$28,888.89
Sub-Electrical	\$58,644.44
Integration Project Mgmt	\$19,871.53
Project Subtotal:	\$709,234.75

Total Installation Price:

\$709,234.75

Grand Total:

\$709,234.75

PROPOSAL SUMMARY

City Wide Surveillance System Upgrade

Town of Golden Beach

1 Golden Beach Drive,
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Revision: 1
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System	Installed Price
CCTV System	\$374,402.14
Access Control Gates	\$29,098.38
MDF/TR Buildout	\$64,078.04
Fiber Optic Infrastructure	\$160,382.33
Power Fiber Equipment	\$17,713.44
Project Indirects	\$63,560.42
Project Subtotal:	\$709,234.75

City Wide Surveillance System Upgrade

Project No : 2022-0802

Rev. 1

8/11/2022

Total Installation Price:

\$709,234.75

Grand Total:

\$709,234.75

Contract

Presented By:



Modified: 8/11/2022
Revision: 1
Project No: 2022-0802

City Wide Surveillance System Upgrade

Interlink Group Professional Services, Inc.

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Town of Golden Beach

1 Golden Beach Drive,
Golden Beach, FL 33160

Project Qualification

1. The general project description is contained in the attached document and related documents from herein referred to as the "Proposal".
2. The specific work to be performed by Contractor is the installation of the specified system as outlined in the Proposal.
3. The total amount to be paid by the owner for the performance (subject to additions and deductions by written change order) shall not exceed the total specified in the Proposal.
4. Progress payments will be made according to the payment schedule below. Equipment will not be ordered until the equipment deposit has been submitted. These times are subject to the timing of the construction and the lead times required for the ordered equipment to be delivered.
5. Payment is due immediately after invoicing. Unpaid balance beyond 10 days after invoicing of completed tasks as outlined in item D shall bear interest payable to Contractor at a rate of 1.5% per month simple interest.
6. This Proposal expires 30 days following the date stated on the top of this agreement. No work will be scheduled without a deposit plus a signed copy of this agreement. All drawings and specifications contingent on agreement and retainer.
7. If job is of a retro-fit/remodel nature on an existing structure, and scope of work exceeds time estimated to complete because of unforeseen circumstances, owner agrees that he/she will be back-charged at a rate of \$65 per man, per hour for all extra labor involved in completing the job.
8. All drawings and documentation are contingent on retainer. Since preparing a proposal requires system design & engineering by a professional Systems Integrator, only one version of the proposal will be prepared without a retainer. If a second version is required or if project is for design & documentation only, a minimum \$400 Design Retainer will be collected. This Design Retainer will cover an additional design and proposal, as well as one block-diagram drawing of the system. The retainer covers design & engineering time and is non-refundable.

9. Contractor reserves the right to replace proposed models in the case of obsolescence, discontinuation or unavailability with a comparable model of equal or greater value upon customer approval. Contractor will not be held responsible or liable in any way for any said product's obsolescence, discontinuation or unavailability.
10. Some equipment has long lead times and requires custom manufacturing. Interlink shall not be responsible for holding up TCO.
11. All work done by Interlink Group is to be completed during normal business hours, 8 a.m. -5 p.m., Monday - Friday.
12. Due to the nature of old conduit, there is a chance that it may be blocked or impassable. If this is the case, additional charges may result.
13. There is no allowance for core drilling unless specifically stated in the Scope of Work.
14. Any firewall penetrations will be performed by Interlink Group in accordance with applicable fire codes.
15. There is no allowance in this quotation for any conduit to be installed by Interlink Group unless specifically called out in the Scope of Work; this excludes 12" pieces for firewall penetrations.
16. Should any changes arise after the commencement of work, a Change Order will have to be submitted to Interlink Group.
17. Interlink Group will clean up any debris that is a result of this proposal.
18. No allowance has been made for any electrical work.
19. All low voltage telecommunication wiring shall be installed in accordance with applicable ANSI/TIA 568-C standards.
20. All electrical work shall conform to the NFPA-70 2017 Edition of the National Electrical Code unless the Interlink Group contract shop drawings indicate to the contrary.
21. All Public Safety Radio Enhancement Systems shall be installed per NFPA 72 & NFPA 1221, 2016 Edition unless the Interlink Group contract shop drawings indicate to the contrary.
22. All projects of a duration longer than 30 calendar days are subject to progress billing and as such will be invoiced using AIA forms G702/703 'Contractor's Application for Payment' based on work in place during the current month. A separate 'Schedule of values' shall be submitted for approval by owner at project start and will act as the basis for monthly invoicing.

Payment Schedule	Amount	Due Date
Initial Deposit	\$354,617.38	
Progress Payment	\$141,846.95	
Progress Payment	\$141,846.95	
Final	\$70,923.47	

Standard Terms and Conditions

1. Contract Documents and Details

The contract documents consist of this agreement, including all general provisions, special provisions, specifications, drawings, addenda, change orders, written interpretations, and written orders for minor changes in work. Work not covered by contract documents will not be required unless it is required by reasonable inference as being necessary to produce the intended result. The costs associated with any related work or materials, including, but not limited to electrical, drywall, painting, core drilling, cabinets are not included unless specifically documented in the proposal. Contractor is not responsible for any underground trenching or laying or supplying of conduit for outside wiring.

2. Time

With respect to schedule completion of the tasks in section D, time is of the essence. If Contractor is delayed at any time in the progress of the work by owner change orders, fire, labor disputes, acts of God or other causes beyond Contractor's control, the completion schedule for the work or affected parts of the work shall be extended by the same amount of the time caused by the delay.

3. Payments and Completion

The above Payment Schedule is a guideline and approximation. Since contractor will, if possible, open, test and burn-in equipment before delivery, all components must be paid for before delivery to job site. Payments may not be withheld under any circumstances. Any disputes due to legal claims will be settled independently in good faith between the parties. If both parties cannot agree on a equitable resolution, mediation shall be sought. See section 9. Final payment shall be due immediately following completion of the project. Contractor will hold owner harmless with respect to claims of subcontractors and suppliers.

4. Insurance

Contractor shall purchase and maintain such insurance necessary to protect from claims under workers compensation and from any damage to the owners property resulting from the conduct of this contract. There are no provisions for 'Waiver of Subrogation' clauses or other special liability limits not covered in normal insurance coverages. If Interlink Group is mandated to secure additional insurance coverages additional costs shall be passed on to the owner. Any OCIP or CCIP coverages shall be disclosed by owner during the proposal cycle to allow Interlink Group to add the additional costs for these coverages.

5. Changes in the Contract

The owner may order changes, additions, or modifications without invalidating the contract. Such changes must be in writing and signed by the owner. The contractor shall provide the owner in writing the amount of additional costs or cost reductions resulting from changes ordered within 15 working days unless this requirement is waived in writing by the owner. Change Orders shall be paid in full upon acceptance of change and shall not alter the contract's payment schedule. In case of product unavailability or discontinuation, contractor reserves the right to substitute equipment of equal or better quality with client's approval. Contractor will be held blameless in case of product unavailability or discontinuation.

6. Warranty

Contractor warranties all parts and labor involved in an installation for one year. Contractor will also be glad to help the client get their manufacturer-warrantied equipment serviced though out the life of the said warranty.

7. Shop / design Drawings

Shop drawings shall be created within a reasonable time after the contract is executed, usually within a two week period. Shop drawings required to be stamped and sealed by a State licensed Professional Engineer will be subject to additional charges for this service.

Contract

8. Special Equipment Ordering

Due to the nature of the low voltage integration business, most of the equipment and project materials are designed and ordered to accommodate the site specific conditions and scope parameters. Because of this special 'made to order status, we cannot guarantee the delivery, installation and commissioning will not delay the scheduled building TCO date. Interlink shall make reasonable effort to expedite the equipment delivery and installation to accommodate a 90 day lead time. However, it is in the best interest of the owner to process the contract, down payment and shop drawing approval process as soon as possible as to not delay the ordering and provisioning process.

9. Mediation

Any dispute in contract clauses and scope shall be brought before mediation in the State of Florida, County of Miami-Dade in order to resolve disputes between the parties.

10. Collection Fees

Any attorney fees for collection of outstanding balances unpaid or legal counsel shall be borne by the owner.

Client: Yovany Diaz

For: Town of Golden Beach

Date:

Contractor: Interlink Group Professional Services, Inc.

Date: