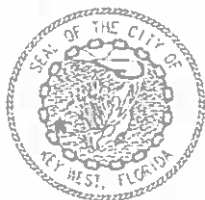


BID DOCUMENTS FOR:



ITB #18-015

**PORT & MARINE SERVICES
CCTV SURVEILLANCE SYSTEM
MALLORY SQUARE & OUTER MOLE**

JANUARY 2018

CITY OF KEY WEST

MAYOR: CITY CRAIG CATES

COMMISSIONERS:

JIMMY WEEKLEY

SAMUEL KAUFMAN

BILLY WARDLOW

RICHARD G. PAYNE

MARGARET ROMERO

CLAYTON LOPEZ

**PREPARED BY:
Port & Marine Services**

ITB DOCUMENTS

**CITY OF KEY WEST
KEY WEST, FLORIDA**

BID DOCUMENTS

for

**CCTV SURVEILLANCE SYSTEM
MALLORY SQUARE & OUTER MOLE**

CONSISTING OF:

**BIDDING REQUIREMENTS
SUPPLEMENTAL INFORMATION
DRAWINGS**

PORT & MARINE SERVICES

JANUARY 2018

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PART 1

BIDDING REQUIREMENTS

INVITATION TO BID

Sealed Bids for City of Key West (CITY) Port & Marine Services "CCTV SURVEILLANCE SYSTEM – MALLORY SQUARE & OUTER MOLE," addressed to the City of Key West, will be received at the office of the City Clerk, 1300 White Street, Key West, Florida until 3:00 p.m., local time, on the 13th day of February 2018, and then will be publicly opened and read. Any bids received after the time and date specified will not be considered.

Please submit one (1) original bid package and two (2) electronic copies on USB drives with a single PDF file of the entire bid package. Bid package shall be enclosed in a sealed envelope, clearly marked on the outside "ITB #18-015 PORT & MARINE SERVICES - CCTV SURVEILLANCE SYSTEM – MALLORY SQUARE & OUTER MOLE" addressed and delivered to the City Clerk at the address noted above.

The project contemplated consists of providing design, equipment, labor and materials necessary to accomplish the following:

- Design and Installation of a CCTV Surveillance System at Mallory Square and Outer Mole check points for Port & Marine Services.

The full Invitation to Bid may be obtained from Demand Star by Onvia and The City of Key West website. Please contact Demand Star at www.demandstar.com or call 1-800-711-1712 or www.cityofkeywest-fl.gov

A Mandatory pre-bid meeting will be held in the conference room at the Key West Historic Seaport Port and Marine Services Offices, 201 William Street, Key West, Florida on February 7, 2018 at 2:30 p.m.

EACH BID MUST BE SUBMITTED ON THE PRESCRIBED FORM AND ACCOMPANIED BY BID SECURITY AS PRESCRIBED IN THE INSTRUCTIONS TO BIDDERS, PAYABLE TO THE CITY OF KEY WEST, FLORIDA, IN AN AMOUNT NOT LESS THAN FIVE (5) PERCENT OF THE AMOUNT BID.

For information please contact Karen Olson, Deputy Director Port and Marine Services by email at kolson@cityofkeywest-fl.gov. Verbal communications, per the City's "Cone of Silence" ordinance is not allowed.

The Bidder shall furnish documentation showing that he is in compliance with the licensing requirements of County, and City licenses as would be required within ten days of the award. The successful Bidder must also be able to satisfy the City Attorney as to such insurance coverage and legal requirements as may be demanded by the Proposal in question. The CITY may reject BID for any and/or all of the following reasons: (1) for budgetary reasons, (2) if the proposer misstates or conceals a material fact in its bid, (3) if the proposal does not strictly conform to the law or is non-responsive to the bid requirements, (4) if the proposal is conditional, or (5) if a change of circumstances occurs making the purpose of the proposal unnecessary to the CITY. (6) if such rejection is in the best interest of the CITY. The CITY may also waive any minor formalities or irregularities in any proposal.

The CITY retains the right to award bid to the bidder or bidders that best meet the needs of the City.

INSTRUCTIONS TO BIDDERS

1. CONTRACT DOCUMENTS

A. FORMAT

The Bid Documents are divided into parts, divisions, and sections for convenient organization and reference.

B. DOCUMENT INTERPRETATION

Should there be any doubt as to the meaning or intent of said Bid Documents, the Bidder should request of the Deputy Director Port and Marine Services, in writing (at least 4 calendar days prior to Bid opening) an interpretation thereof. Any interpretation or change in said Bid Documents will be made only in writing in the form of Addenda to the Documents, which will be furnished to all registered holders of Bid Documents. Bidders shall submit with their Bids, or indicate receipt of all Addenda. The Owner will not be responsible for any other explanation or interpretations of said Documents.

2. SCOPE OF SERVICES

Vendor shall provide necessary wiring, cabling, install, configure and test equipment and materials necessary to add security cameras, to include internet services and licenses to system. Cameras shall be installed in two locations as identified in the SUMMARY OF WORK

4. REQUIRED QUALIFICATIONS

The prospective Bidder must meet the statutorily prescribed requirements before award of Contract by the CITY. Bidders must hold or obtain all licenses and/or certificates as required by the State and Local Statutes in order to bid and provide the product specified herein. Additionally, all Bidders must meet the minimum qualifications as described in Required Qualifications section.

4. TYPE OF BID

UNIT PRICE BID

Bid unit prices stated in this proposal include all costs and expenses for labor, equipment, materials, disposal and contractor's overhead and profit. Unit prices for the various work items are intended to establish a total price for completing the project in its entirety. All work and incidental costs shall be included for payment under the several scheduled items of the overall contract, and no separate payment will be made therefore.

5. PREPARATION OF BIDS

A. GENERAL

All blank spaces in the BID form must be filled in for all schedules and associated parts, as required, preferably in BLACK INK. All price information shall be clearly shown in both words and figures where required. No changes shall be made in the phraseology of the forms. Written amounts shall govern in case of discrepancy between the amounts stated in

writing and the amounts stated in figures. In case of discrepancy between unit prices and extended totals, unit prices shall prevail.

Any BID shall be deemed informal which contains omissions, erasures, alterations, or additions of any kind, or prices uncalled for, or in which any of the prices are obviously unbalanced, or which in any manner shall fail to conform to the conditions of the published Invitation to BID.

Only one BID from any individual, firm, partnership, or corporation, under the same or different names, will be considered. Should it appear to the Owner that any Bidder is interested in more than one BID for work contemplated; all Bids in which such Bidder is interested will be rejected.

B. SIGNATURE

The Bidder shall sign his BID in the blank space provided therefor. If Bidder is a corporation, the legal name of the corporation shall be set forth above together with the signature of the officer or officers authorized to sign Contracts on behalf of the corporation. If Bidder is a partnership, the true name of the firm shall be set forth above together with the signature of the partner or partners authorized to sign Contracts in behalf of the partnership. If signature is by an agent, other than an officer of a corporation or a member of a partnership, a notarized power-of-attorney must be on file with the Owner prior to opening of Bids or submitted with the Bid otherwise the Bid will be regarded as not properly authorized.

C. ATTACHMENTS

Bidder shall complete and submit the following forms with his bid:

- Anti-Kickback Affidavit
- Sworn Statement under section 287.133(3)(a) Florida Statutes, on public entity crimes
- Indemnification Form
- Local Vendors Form
- City of Key West Business License Tax Receipt
- Domestic Partnership Affidavit
- Cone of Silence Affidavit
- A complete description of the proposed Wireless Surveillance System including layout
- Cut sheets on all equipment
- Warranty information/ proposal (The City requires Bidder to warranty all materials and labor for two (2) years). Warranty to begin once the City determines the system is operating as specified in the specifications for a period of thirty (30) days. Bidder shall submit a warranty proposal to be included as part of a contract.
- All requirements listed in SUMMARY OF WORK

6. MODIFICATION OR WITHDRAWAL OF BID

Prior to the time and date designated for receipt of Bids, any Bid submitted may be withdrawn by notice to the party receiving Bids at the place designated for receipt of Bids. Such notice shall be in writing over the signature of the Bidder or by telegram. If by telegram, written confirmation over the signature of the Bidder shall be mailed and postmarked on or before the date and time set for receipt of Bids. No Bid may be

withdrawn after the time scheduled for opening of Bids unless the time specified in paragraph AWARD OF CONTRACT of these Instructions to Bidders shall have elapsed.

7. AWARD OF CONTRACT

Within SIXTY (60) calendar days after the opening of Bids, the CITY will accept one of the Bids or will act in accordance with the following paragraphs. The acceptance of the Bid will be by written notice of award, mailed to the office designated in the Bid, or delivered to the Bidder's representative. In the event of failure of the lowest responsive, responsible Bidder to sign the Contract and provide an acceptable insurance certificate(s) and evidence of holding required licenses and certificates, the Owner may award the Contract to the next lowest responsive, responsible Bidder. Such award, if made, will be made within ninety (90) days after the opening of Proposals.

The CITY reserves the right to accept or reject any or all Bids and to waive any formalities and irregularities in said Bids.

8. BASIS OF AWARD

The award will be made by the Owner on the basis of the BID from the lowest, responsive, responsible BIDDER(s) which, in the Owner's sole and absolute judgment will best serve the interest of the Owner. Low bid(s) selection to be based on an hourly rate comparison.

9. PUBLIC RECORDS REQUIREMENTS

In addition to other contract requirements provided by law, each public agency contract for services must include a provision that requires the Vendor to comply with public records laws, specifically to (a) keep and maintain public records that ordinarily and necessarily would be required by the public agency in order to perform the service; (b) provide the public with access to public records on the same terms and conditions that the public agency would provide the records and at a cost that does not exceed the cost provided in this chapter or as otherwise provided by law; (c) ensure that public records that are exempt or confidential and exempt from public records disclosure requirements are not disclosed except as authorized by law; and (d) meet all requirements for retaining public records and transfer, at no cost, to the public agency all public records in possession of the Vendor upon termination of the contract and destroy any duplicate public records that exempt or confidential and exempt from public records disclosure requirements. All records stored electronically must be provided to the public agency in a format that is compatible with the information technology systems of the public agency. If a Vendor does not comply with a public records request, the public agency shall enforce the contract provisions in accordance with the contract.

10. BIDDER'S DECLARATION AND UNDERSTANDING

The undersigned, hereinafter called the Bidder, declares that the only persons or parties interested in this Bid are those named herein, that this Bid is, in all respects, fair and without fraud, that it is made without collusion with any official of the Owner, and that the Bid is made without any connection or collusion with any person submitting another Bid on this Contract.

The Bidder further declares that he has carefully examined the Contract Documents and that this Bid is made according to the provisions and under the terms of the Contract Documents, which Documents are hereby made a part of this Bid.

11. INDEMNITY LANGUAGE

To the fullest extent permitted by law, the VENDOR expressly agrees to indemnify and hold harmless the City of Key West, their officers, directors, agents and employees *(herein called the "indemnitees") from liabilities, damages, losses and costs, including but not limited to, reasonable attorney's fees and court costs, such legal expenses to include costs incurred in establishing the indemnification and other rights agreed to in this Paragraph, to persons or property, to the extent caused by the negligence, recklessness, or intentional wrongful misconduct of the CONTRACTOR, its Subcontractors or persons employed or utilized by them in the performance of the Contract. Claims by indemnitees for indemnification shall be limited to the amount of CONTRACTOR's insurance or \$1 million per occurrence, whichever is greater. The parties acknowledge that the amount of the indemnity required hereunder bears a reasonable commercial relationship to the Contract and it is part of the project specifications or the bid documents, if any.

The indemnification obligations under the Contract shall not be restricted in any way by any limitation on the amount or type of damages, compensation, or benefits payable by or for the VENDOR under Workers' Compensation acts, disability benefits acts, or other employee benefits acts, and shall extend to and include any actions brought by or in the name of any employee of the VENDOR or of any third party to whom VENDOR may subcontract a part or all of the Work. This indemnification shall continue beyond the date of completion of the work.

12. CERTIFICATES OF INSURANCE

Bidder agrees to furnish the Owner, before commencing the work under this Contract, the certificates of insurance as specified below.

VENDOR is to secure, pay for, and file with the City of Key West, prior to commencing any work under the Contract, all certificates for workers' compensation, public liability, and property damage liability insurance, and such other insurance coverages as may be required by specifications and addenda thereto, in at least the following minimum amounts with specification amounts to prevail if greater than minimum amounts indicated. Notwithstanding any other provision of the Contract, the VENDOR shall provide the minimum limits of liability insurance coverage as follows:

Auto Liability	\$1,000,000	Combined Single Limit
General Liability	\$2,000,000	Aggregate (Per Project)
	\$2,000,000	Products Aggregate
	\$1,000,000	Any One Occurrence
	\$1,000,000	Personal Injury
	\$ 300,000	Fire Damage/Legal
Additional Umbrella Liability	\$1,000,000	Occurrence / Aggregate

VENDOR shall furnish an original Certificate of Insurance indicating, and such policy providing coverage to, City of Key West named as an additional insured on a PRIMARY

and NON-CONTRIBUTORY basis utilizing an ISO standard endorsement at least as broad as CG 2010 (11/85) or its equivalent, (combination of CG 20 10 07 04 and CG 20 37 07 04, providing coverage for completed operations, is acceptable) including a waiver of subrogation clause in favor of City of Key West on all policies. VENDOR will maintain the General Liability and Umbrella Liability insurance coverages summarized above with coverage continuing in full force including the additional insured endorsement until at least 3 years beyond completion and delivery of the work contracted herein.

Notwithstanding any other provision of the Contract, the VENDOR shall maintain complete workers' compensation coverage for each and every employee, principal, officer, representative, or agent of the VENDOR who is performing any labor, services, or material under the Contract. Further, VENDOR shall additionally maintain the following minimum limits of coverage:

Bodily Injury Each Accident	\$1,000,000
Bodily Injury by Disease Each Employee	\$1,000,000
Bodily Injury by Disease Policy Limit	\$1,000,000

VENDOR shall provide the City of Key West with a Certificate of Insurance verifying compliance with the workman's compensation coverage as set forth herein and shall provide as often as required by the City of Key West such certification which shall also show the insurance company, policy number, effective and expiration date, and the limits of workman's compensation coverage under each policy.

CONTRACTOR's insurance policies shall be endorsed to give 30 days written notice to the City of Key West in the event of cancellation or material change, using form CG 02 24, or its equivalent.

Certificates of Insurance submitted to the City of Key West will not be accepted without copies of the endorsements being requested. This includes additional insured endorsements, cancellation/material change notice endorsements, and waivers of subrogation. Copies of USL&H Act and Jones Act endorsements will also be required if necessary. PLEASE ADVISE YOUR INSURANCE AGENT ACCORDINGLY.

VENDOR will comply with any and all safety regulations required by any agency or regulatory body including but not limited to OSHA. VENDOR will notify City of Key West immediately by telephone at (305) 809-3811 any accident or injury to anyone that occurs on the jobsite and is related to any of the work being performed by the CONTRACTOR.

SURETY AND INSURER QUALIFICATIONS

All bonds, insurance contracts, and certificates of insurance shall be either executed by or countersigned by a licensed resident agent of the Surety or insurance company, having his place of business in the State of Florida, and in all ways complying with the insurance laws of the State of Florida. Further, the said Surety or insurance company shall be duly licensed and qualified to do business in the State of Florida.

13. TIME OF COMPLETION

The time of completion of the work to be performed under this Contract is the essence of the Contract. When the Contractor receives a Notice to Proceed, he shall commence work as soon as possible and shall complete all work within the number of calendar days stipulated in this Proposal.

The term of this contract will be **30** days.

14. ADDENDA

The Bidder hereby acknowledges that he has received Addenda No's. 1, 2, _____, and agrees that all addenda issued are hereby made part of the Contract Documents, and the Bidder further agrees that his Bid(s) includes all impacts resulting from said addenda.

15. TRANSPORTATION WORKERS IDENTIFICATION CREDENTIAL (TWIC) CARD

The Vendor, vendor's installer and vendor's subcontractor(s) must have or obtain TWIC cards or follow strict guidelines for escorting non-vetted personal.

* * * * *

BID FORMS

BID FORM

Project Title: **CCTV SURVEILLANCE SYSTEM
MALLORY SQUARE & OUTER MOLE**
Project No.: **ITB #18-015**

UNIT PRICE BID

Bid unit prices stated in this proposal include all costs and expenses for labor, equipment, materials, disposal and contractor's overhead and profit. Unit prices for the various work items are intended to establish a total price for completing the project in its entirety. All work and incidental costs shall be included for payment under the several scheduled items of the overall contract, and no separate payment will be made therefore.

MALLORY SQUARE

1. Permit Fees (to be paid at cost)

1 LS \$ 1,000.00

2. 180 Degree 4K Camera (includes all material, equipment and labor)

2 EA Unit Price \$ 10,320.00 TOTAL \$ 20,640.00

3. PZT 1080p Camera (includes all material, equipment and labor)

1 EA Unit Price \$ 13,760.00 TOTAL \$ 13,760.00

4. Antenna / Radio (includes all material, equipment and labor)

QTY. 2 Unit Price \$ 4,300.00 TOTAL \$ 8,600.00

5. Base Station Antenna / Radio (includes all material, equipment and labor)

QTY. 1 Unit Price \$ 4,500.00 TOTAL \$ 4,500.00

6. POE Switch (includes all material, equipment and labor)

QTY. 1 Unit Price \$ 1,290.00 TOTAL \$ 1,290.00

7. Network Video Recorder (includes all material, equipment and labor)

1 LS \$ 19,350.00

8. 4K Monitor (includes all material, equipment and labor)

1 LS \$ 1,300.00

9. Battery Back-up (includes all material, equipment and labor)

1 LS \$ 6,450.00

10. Surge Protection (includes all material, equipment and labor)

1 LS \$ 1,935.00

11. Weather/Vandal Proof Enclosure (includes all material, equipment and labor)

1 LS \$ 9,250.00

SUB-TOTAL OF ALL EXTENDED LINE ITEMS LISTED ABOVE:

Total of **Mallory Square** line items 1 - 11 \$ 88,075.00

OUTER MOLE

12. Permit Fees (to be paid at cost)

1 LS \$ 1,000.00

13. 180 Degree 4K Camera (includes all material, equipment and labor)

2 EA Unit Price \$ 10,320.00 TOTAL \$ 20,640.00

14. PZT 1080p Camera (includes all material, equipment and labor)

1 EA Unit Price \$ 13,760.00 TOTAL \$ 13,760.00

15. Antenna / Radio (includes all material, equipment and labor)

QTY. 2 Unit Price \$ 4,300.00 TOTAL \$ 8,600.00

16. Base Station Antenna / Radio (includes all material, equipment and labor)

QTY. 1 Unit Price \$ 4,500.00 TOTAL \$ 4,500.00

17. POE Switch (includes all material, equipment and labor)

QTY. 1 Unit Price \$ 1,290.00 TOTAL \$ 1,290.00

18. Network Video Recorder (includes all material, equipment and labor)

1 LS \$ 19,350.00

19. 4K Monitor (includes all material, equipment and labor)

1 LS \$ 2,150.00

120. Battery Back-up (includes all material, equipment and labor)

1 LS \$ 6,450.00

21. Surge Protection (includes all material, equipment and labor)

1 LS \$ 1,935.00

SUB-TOTAL OF ALL EXTENDED LINE ITEMS LISTED ABOVE:

Total of **Outer Mole** line items 12 - 21 \$ 79,675.00

22. Wi-Fi Service (30/30MBPS bandwidth) and 24hr System Monitoring

24 MO Unit Price/Mo. \$ 1,000.00 TOTAL \$ 24,000.00

23. General Allowance (only to be used with Owner's written approval)

1 LS \$ 5,000.00

TOTAL OF ALL EXTENDED LINE ITEMS LISTED ABOVE:

Total of line items 1 - 23 \$ 196,750.00

One Hundred Ninety-Six Thousand Seven Hundred Fifty Dollars & Zero Cents
(amount written in words)

Cost of work to be all inclusive for a complete job including equipment, material, labor, permits, insurance, overhead and profit.

Alternate Bid #1

1. Security staff monitoring stations for both Mallory Square and Outer Mole to be shared and located at the Outer Mole checkpoint ((1) Monitor, (1) NVR).

Total of lump sum BID ALTERNATE #1 ADD / DEDUCT (circle one) \$ 6,150.00

Six Thousand One Hundred Fifty Dollars & Zero Cents
(amount written in words)

Additional Pricing

1. Monthly system maintenance cost after warranty expiration. Costs to include all material, equipment and labor.

1 MO Unit Price/Mo. \$ 3,700.00

NOTE: THE TOTAL BID WILL BE THE BASIS OF EVALUATING LOW BIDDER AND BASIS OF AWARD

BIDDER'S INFORMATION

Company Name: Hy-Tech Solutions, Inc.

Address: 5730 2nd Avenue

Key West, FL 33040

Contact Name: Raymond Vazquez

Email: rvazquez@flkeyselectric.com

Telephone: 305-296-5111

Fax: 305-296-9283

Signature:  Date: 02/19/18

SUBCONTRACTORS

The Bidder further proposes that the following subcontracting firms or businesses will be awarded subcontracts for the following portions of the work in the event that the Bidder is awarded the Contract:

Electrical Conduit and Connections.

Portion of Work

Florida Keys Electric, Inc.

Name

5730 2nd Avenue, Key West, FL, 33040
Street City State Zip

Wifi Service, Antenna Support, Integration, System Health Monitoring.

Portion of Work

Broadwave, LLC

Name

1111 12th Street #106, Key West, FL, 33040
Street City State Zip

SURETY

SURETY

FCCI Insurance Company whose address is
6300 University Parkway, Sarasota, FL, 34240
Street City State Zip
305-670-5388 Bill Parker
Phone Resident Agent

BIDDER

The name of the Bidder submitting this Bid is Hy-Tech Solutions, Inc.
doing business
at

5730 2nd Avenue, Key West, FL, 33040
Street City State Zip
rvazquez@flkeyselectric.com
email address

which is the address to which all communications concerned with this Bid and with the Contract shall be sent.

The names of the principal officers of the corporation submitting this Bid, or of the partnership, or of all persons interested in this Bid as principals are as follows:

Name	Title
<u>Raymond Vazquez</u>	<u>President</u>
<u></u>	<u></u>
<u></u>	<u></u>
<u></u>	<u></u>

If Sole Proprietor or Partnership

IN WITNESS hereto the undersigned has set his (its) hand this ____ day of _____ 20__.

Signature of Bidder

Title

If Corporation

IN WITNESS WHEREOF the undersigned corporation has caused this instrument to be executed and its seal affixed by its duly authorized officers this 19th day of February 2018.

(SEAL)

Hy-Tech Solutions, Inc.

Name of Corporation

By _____

Title _____

President

Attest _____
Secretary

Sworn and subscribed before me this 19th day of February 2018.

NOTARY PUBLIC, State of Florida, at Large

My Commission Expires:



BID BOND

FLORIDA BID BOND

BOND NO. N/A

AMOUNT: \$ 5% of amount bid

KNOW ALL MEN BY THESE PRESENTS, that Hy-Tech Solutions, Inc.

hereinafter called the PRINCIPAL, and FCCI Insurance Company

a corporation duly organized under the laws of the State of Florida

having its principal place of business at 6300 University Parkway, Sarasota, FL 34240

_____ in the State of Florida.

and authorized to do business in the State of Florida, as SURETY, are held and firmly bound unto

City of Key West

hereinafter CITY OF KEY WEST called the OBLIGEE, in the sum of Five Percent of
amount bid 5% of amount DOLLARS (\$bid) for

the payment for which we bind ourselves, our heirs, executors, administrators, successors, and assigns, jointly and severally, firmly by these present.

THE CONDITION OF THIS BOND IS SUCH THAT:

WHEREAS, the PRINCIPAL is herewith submitting his or its Bid Proposal for **PORT & MARINE SERVICES - CCTV SURVEILLANCE SYSTEM – MALLORY SQUARE & OUTER MOLE**, said Bid Proposal, by reference thereto, being hereby made a part hereof.

WHEREAS, the PRINCIPAL contemplates submitting or has submitted a bid to the OBLIGEE for the furnishing of all labor, materials (except those to be specifically furnished by the CITY), equipment, machinery, tools, apparatus, means of transportation for, and the performance of the work covered in the Proposal and the detailed Specifications, entitled:

ITB #18-015

PORT & MARINE SERVICES

CCTV SURVEILLANCE SYSTEM

MALLORY SQUARE & OUTER MOLE

WHEREAS, it was a condition precedent to the submission of said bid that a cashier's check, certified check, or bid bond in the amount of 5 percent of the base bid be submitted with said bid as a guarantee that the Bidder would, if awarded the Contract, enter into a written Contract with the CITY for the performance of said Contract, within 10 working days after written notice having been given of the award of the Contract.

NOW, THEREFORE, the conditions of this obligation are such that if the PRINCIPAL within 10 consecutive calendar days after written notice of such acceptance, enters into a written Contract with the OBLIGEE and furnishes the Performance and Payment Bonds, each in an amount equal to 100 percent of the base bid, satisfactory to the CITY, then this obligation shall be void; otherwise the sum herein stated shall be due and payable to the OBLIGEE and the Surety herein agrees to pay said sum immediately upon demand of the OBLIGEE in good and lawful money of the United States of America, as liquidated damages for failure thereof of said PRINCIPAL.

Signed and sealed this 16 day of February, 2018
Hy-Tech Solutions, Inc.

By 
PRINCIPAL

FCCI Insurance Company
SURETY

By 
Attorney-In-Fact Eduardo A. Menendez
& FL Res. Agent



More than a policy. A promise.

GENERAL POWER OF ATTORNEY

Know all men by these presents: That the FCCI Insurance Company, a Corporation organized and existing under the laws of the State of Florida (the "Corporation") does make, constitute and appoint:

William F Kleis; William L Parker; Davor I Mimica; Ileana M Bauza; Eduardo A. Menendez

Each, its true and lawful Attorney-In-Fact, to make, execute, seal and deliver, for and on its behalf as surety, and as its act and deed in all bonds and undertakings provided that no bond or undertaking or contract of suretyship executed under this authority shall exceed the sum of (not to exceed \$7,500,000): \$7,500,000.00

This Power of Attorney is made and executed by authority of a Resolution adopted by the Board of Directors. That resolution also authorized any further action by the officers of the Company necessary to effect such transaction.

The signatures below and the seal of the Corporation may be affixed by facsimile, and any such facsimile signatures or facsimile seal shall be binding upon the Corporation when so affixed and in the future with regard to any bond, undertaking or contract of surety to which it is attached.

In witness whereof, the FCCI Insurance Company has caused these presents to be signed by its duly authorized officers and its corporate Seal to be hereunto affixed, this 25TH day of September, 2016.

Attest:

Craig Johnson
Craig Johnson, President
FCCI Insurance Company



Thomas A. Koval Esq., EVP, Chief Legal Officer,
Government Affairs and Corporate Secretary
FCCI Insurance Company

State of Florida
County of Sarasota

Before me this day personally appeared Craig Johnson, who is personally known to me and who executed the foregoing document for the purposes expressed therein.

My commission expires: 9/25/2020



Arlene Alonso
Notary Public

State of Florida
County of Sarasota

Before me this day personally appeared Thomas A. Koval, Esq., who is personally known to me and who executed the foregoing document for the purposes expressed therein.

My commission expires: 9/25/2020



Arlene Alonso
Notary Public

CERTIFICATE

I, the undersigned Secretary of FCCI Insurance Company, a Florida Corporation, DO HEREBY CERTIFY that the foregoing Power of Attorney remains in full force and has not been revoked; and furthermore that the February 24, 2011 Resolution of the Board of Directors, referenced in said Power of Attorney, is now in force.

Dated this 16 day of February, 2018

Thomas A. Koval, Esq., EVP, Chief Legal Officer,
Government Affairs and Corporate Secretary



ANTI-KICKBACK AFFIDAVIT

ANTI-KICKBACK AFFIDAVIT

STATE OF Florida)

: SS

COUNTY OF Monroe)

I, the undersigned hereby duly sworn, depose and say that no portion of the sum herein bid will be paid to any employees of the City of Key West as a commission, kickback, reward or gift, directly or indirectly by me or any member of my firm or by an officer of the corporation.

By: 

Sworn and subscribed before me this 19th day of February 2018.

NOTARY PUBLIC, State of Florida at Large



My Commission Expires:



* * * * *

PUBLIC ENTITY CRIME FORM

**SWORN STATEMENT UNDER SECTION 287.133(3)(A)
FLORIDA STATUTES, ON PUBLIC ENTITY CRIMES**

THIS FORM MUST BE SIGNED IN THE PRESENCE OF A NOTARY PUBLIC OR OTHER OFFICER AUTHORIZED TO ADMINISTER OATHS.

1. This sworn statement is submitted with Bid or Proposal for _____

ITB #18-015 PORT & MARINE SERVICES - CCTV SURVEILLANCE SYSTEM MALLORY SQUARE & OUTER MOLE

2. This sworn statement is submitted by Hy-Tech Solutions, Inc.
(name of entity submitting sworn statement)

whose business address is 5730 2nd Avenue Key West, FL 33040

and (if applicable) its Federal Employer Identification Number (FEIN) is 81-4831213

(If the entity has no FEIN, include the Social Security Number of the individual
signing this sworn statement _____)

3. My name is Raymond Vazquez
(please print name of individual signing)

and my relationship to the entity named above is President

4. I understand that a "public entity crime" as defined in Paragraph 287.133(1)(g), Florida Statutes, means a violation of any state or federal law by a person with respect to and directly related to the transaction of business with any public entity or with an agency or political subdivision of any other state or with the United States, including but not limited to, any bid or contract for goods or services to be provided to any public or an agency or political subdivision of any other state or of the United States and involving antitrust, fraud, theft, bribery, collusion, racketeering, conspiracy, material misrepresentation.

5. I understand that "convicted" or "conviction" as defined in Paragraph 287.133(1)(b), Florida Statutes, means a finding of guilt or a conviction of a public entity crime, with or without an adjudication of guilt, in any federal or state trial court of record relating to charges brought by indictment information after July 1, 1989, as a result of a jury verdict, nonjury trial, or entry of a plea of guilty or nolo contendere.

6. I understand that an "affiliate" as defined in Paragraph 287.133(1)(a), Florida Statutes, means

1. A predecessor or successor of a person convicted of a public entity crime; or
2. An entity under the control of any natural person who is active in the management of the entity and who has been convicted of a public entity crime. The term "affiliate" includes those officers, directors, executives, partners, shareholders, employees, members, and agents who are active in the management of an affiliate. The ownership by one person of shares constituting controlling interest in another person, or a pooling of equipment or income among persons when not for fair market value under an arm's length agreement, shall be a prima facie case that one person controls another person. A person who knowingly enters into a joint venture with a person who has been convicted of a public entity crime in Florida during the preceding 36 months shall be considered an affiliate.

7. I understand that a "person" as defined in Paragraph 287.133(1)(8), Florida Statutes, means any natural person or entity organized under the laws of any state or of the United States with the legal power to enter into a binding contract and which bids or applies to bid on contracts for the provision of goods or services let by a public entity, or which otherwise transacts or applies to transact business with public entity. The term "person" includes those officers, directors, executives, partners, shareholders, employees, members, and agents who are active in management of an entity.

8. Based on information and belief, the statement which I have marked below is true in relation to the entity submitting this sworn statement. (Please indicate which statement applies).

☒ Neither the entity submitting this sworn statement, nor any officers, directors, executives, partners, shareholders, employees, members, or agents who are active in management of the entity, nor any affiliate of the entity have been charged with and convicted of a public entity crime subsequent to July 1, 1989, AND (Please indicate which additional statement applies.)

☐ There has been a proceeding concerning the conviction before a hearing of the State of Florida, Division of Administrative Hearings. The final order entered by the hearing officer did not place the person or affiliate on the convicted vendor list. (Please attach a copy of the final order.)

☐ The person or affiliate was placed on the convicted vendor list. There has been a subsequent proceeding before a hearing officer of the State of Florida, Division of Administrative Hearings. The final order entered by the hearing officer determined that it was in the public interest to remove the person or affiliate from the convicted vendor list. (Please attach a copy of the final order.)

☒ The person or affiliate has not been put on the convicted vendor list. (Please describe any action taken by or pending with the Department of General Services.)

(signature)

02/19/18
(date)

STATE OF Florida

COUNTY OF Monroe

PERSONALLY APPEARED BEFORE ME, the undersigned authority,

Raymond Vazquez who, after first being sworn by me, affixed his/her
(name of individual signing)

signature in the space provided above on this 19th day of February, 20 18.

My commission expires:

Melinda Oviedo
NOTARY PUBLIC



INDEMNIFICATION FORM

CITY OF KEY WEST INDEMNIFICATION FORM

To the fullest extent permitted by law, the **VENDOR** expressly agrees to indemnify and hold harmless the City of Key West, their officers, directors, agents and employees (herein called the "indemnitees") from any and all liability for damages, including, if allowed by law, reasonable attorney's fees and court costs, such legal expenses to include costs incurred in establishing the indemnification and other rights agreed to in this Paragraph, to persons or property, caused in whole or in part by any act, omission, or default by **VENDOR** or its subcontractors, material men, or agents of any tier or their employees, arising out of this agreement or its performance, including any such damages caused in whole or in part by any act, omission or default of any indemnitee, but specifically excluding any claims of, or damages against an indemnitee resulting from such indemnitee's gross negligence, or the willful, wanton or intentional misconduct of such indemnitee or for statutory violation or punitive damages except and to the extent the statutory violation or punitive damages are caused by or result from the acts or omissions of the **VENDOR** or its subcontractors, material men or agents of any tier or their respective employees.

Indemnification by **VENDOR** for Professional Acts. **VENDOR** hereby agrees to indemnify the City of Key West and each of its parent and subsidiary companies and the directors, officers and employees of each of them (collectively, the "indemnitees"), and hold each of the indemnitees harmless, against all losses, liabilities, penalties (civil or criminal), fines and expenses (including reasonable attorneys' fees and expenses) (collectively, "Claims") to the extent resulting from the performance of **VENDOR**'s negligent acts, errors or omissions or intentional acts in the performance of **VENDOR**'s services, or any of their respective affiliates, under this Agreement. If claims, losses, damages, and judgments are found to be caused by the joint or concurrent negligence of the City of Key West and **VENDOR**, they shall be borne by each party in proportion to its negligence.

VENDOR:

Hy-Tech Solutions, Inc.

SEAL:

5730 2nd Avenue Key West, FL 33040

Address

Signature

Raymond Vazquez

Print Name

President

Title

DATE:

02/19/18

NOTARY PUBLIC, State of Florida at Large

My Commission Expires:



* * * * *

EQUAL BENEFITS AFFIDAVIT

EQUAL BENEFITS FOR DOMESTIC PARTNERS AFFIDAVIT

STATE OF Florida)

: SS

COUNTY OF Monroe)

I, the undersigned hereby duly sworn, depose and say that the firm of _____

Hy-Tech Solutions, Inc.

provides benefits to domestic partners of its employees on the same basis as it provides benefits to employees' spouses, per City of Key West Code of Ordinances Sec. 2-799.

By: _____

Sworn and subscribed before me this 19th day of February 20 18.

NOTARY PUBLIC, State of Florida at Large

My Commission Expires:



* * * * *

CONE OF SILENCE AFFIDAVIT

CONE OF SILENCE AFFIDAVIT

STATE OF Florida)

: SS

COUNTY OF Monroe)

I, the undersigned hereby duly sworn, depose and say that all owner(s), partners, officers, directors, employees and agents representing the firm of Hy-Tech Solutions, Inc. have read and understand the limitations and procedures regarding communications concerning City of Key West Code of Ordinances Sec. 2-773 Cone of Silence.

By: 

Sworn and subscribed before me this

19th day of February 20 18



NOTARY PUBLIC, State of Florida at Large

My Commission Expires: _____



* * * * *

CERTIFICATE OF INSURANCE

ACORD_{TM}

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

05/01/2017

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER Gulfshore Insurance, Inc SWFL 4100 Goodlette Road N Naples, FL 34103 239 261-3646	CONTACT NAME: Maria Jebb	
	PHONE (A/C, No, Ext): 239-435-7120	FAX (A/C, No): 239-213-2803
E-MAIL ADDRESS: mjebb@gulfshoreinsurance.com		
INSURED Hy-Tech Solutions, Inc 5730 2nd Avenue Key West, FL 33040	INSURER(S) AFFORDING COVERAGE	
	INSURER A: Everest Indemnity Ins Company	NAIC # 10851
	INSURER B: FCCI Insurance Company	10178
	INSURER C:	
	INSURER D:	
	INSURER E:	
INSURER F:		

COVERAGES

CERTIFICATE NUMBER:

REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSR	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	GENERAL LIABILITY			51GLM13090171	04/26/2017	04/26/2018	EACH OCCURRENCE \$1,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$50,000 MED EXP (Any one person) \$5,000 PERSONAL & ADV INJURY \$1,000,000 GENERAL AGGREGATE \$2,000,000 PRODUCTS - COMP/OP AGG \$2,000,000 \$
	<input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR <input checked="" type="checkbox"/> BI/PD Ded: \$1,000 GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input checked="" type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC						
	TOMOBILE LIABILITY			CA100013197	04/26/2017	04/26/2018	COMBINED SINGLE LIMIT (Ea accident) \$1,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$ \$
	<input checked="" type="checkbox"/> ANY AUTO <input type="checkbox"/> ALL OWNED AUTOS <input checked="" type="checkbox"/> HIRED AUTOS <input checked="" type="checkbox"/> Drive Oth Car <input type="checkbox"/> SCHEDULED AUTOS <input checked="" type="checkbox"/> NON-OWNED AUTOS						
A	UMBRELLA LIAB			51E0003576171	04/26/2017	04/26/2018	EACH OCCURRENCE \$1,000,000 AGGREGATE \$1,000,000 \$
	<input checked="" type="checkbox"/> EXCESS LIAB <input type="checkbox"/> DED <input checked="" type="checkbox"/> RETENTION \$0 <input checked="" type="checkbox"/> CLAIMS-MADE						
B	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY			001WC17A76146	04/26/2017	04/26/2018	<input checked="" type="checkbox"/> WC STATU-TORY LIMITS <input type="checkbox"/> OTH-ER E.L. EACH ACCIDENT \$1,000,000 E.L. DISEASE - EA EMPLOYEE \$1,000,000 E.L. DISEASE - POLICY LIMIT \$1,000,000
	ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? <input type="checkbox"/> Y <input checked="" type="checkbox"/> N/A (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below						

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach ACORD 101, Additional Remarks Schedule, if more space is required)

CERTIFICATE HOLDER

CANCELLATION

City of Key West
1300 White Street
Key West, FL 33040

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

Paul A. Hammer

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CONTRACT FORMS

PART 2

CONTRACT FORMS

CONTRACT

This Contract, made and entered into this 19th day of February 2018,
by and between the City of Key West, hereinafter called the "Owner", and _____

Hy-Tech Solutions, Inc.

hereinafter called the "Vendor";

WITNESSETH:

The Vendor, in consideration of the sum to be paid him by the Owner and of the covenants and agreements herein contained, hereby agrees at his own proper cost and expense to do all the work and furnish all the materials, tools, labor, and all appliances, machinery, and appurtenances for **ITB #18-015 PORT & MARINE SERVICES - CCTV SURVEILLANCE SYSTEM – MALLORY SQUARE & OUTER MOLE**, Key West, Florida to the extent of the Bid made by the Vendor, dated the 19th day of February 2018, all in full compliance with the Contract Documents referred to herein.

The CONTRACT DOCUMENTS, including the signed copy of the BID, BIDDING REQUIREMENTS, SPECIFICATIONS and DRAWINGS are hereby referred to and by reference made a part of this Contract as fully and completely as if the same were fully set forth herein and are mutually cooperative therewith.

In consideration of the performance of the work as set forth in these Contract Documents, the Owner agrees to pay to the Vendor the amount BID as adjusted in accordance with the Contract Documents, or as otherwise herein provided, and to make such payments in the manner and at the times provided in the Contract Documents.

The Vendor agrees to complete the work within **thirty (30)** days and to accept as full payment hereunder the amounts computed as determined by the Contract Documents and based on the said BID.

The Vendor agrees to remedy all defects appearing in the work or developing in the materials furnished and the workmanship performed under this Contract during the warranty period after the date of final acceptance of the work by the Owner, and further agrees to indemnify and hold the Owner harmless from any costs encountered in remedying such defects.

It is agreed that the Contract, based upon the BID, shall be fully complete within the stated number of consecutive calendar days from the date the Notice to Proceed is issued.

In the event the Vendor fails to complete the work within the time limit or extended time limit agreed upon, as more particularly set forth in the Contract Documents, **liquidated damages** shall be paid at a rate of **\$250 per day**. Sundays and legal holidays shall be included in determining days in default.

This contract will automatically expire upon completion of the project. Vendor warranty obligations remain in effect.

IN WITNESS WHEREOF, we, the parties hereto, each herewith subscribe the same this

19th Day of February, 2018.

CITY OF KEY WEST

By _____
James K. Scholl, City Manager

VENDOR

By _____

Printed Raymond Vazquez

Title President

APPROVED AS TO FORM

Attorney for Owner

* * * * *

CITY OF KEY WEST, FLORIDA

Business Tax Receipt

This Document is a business tax receipt
Holder must meet all City zoning and use provisions.
P.O. Box 1409, Key West, Florida 33040 (305) 809-3955

Business Name HY-TECH SOLUTIONS, INC. CtlNbr:0026621
Location Addr 5730 2ND AVE
Lic NBR/Class 18-00032761 CONTRACTOR - CERT ELECTRICAL
Issue Date: July 26, 2017 Expiration Date: September 30, 2018
License Fee \$325.00
Add. Charges \$0.00
Penalty \$0.00
Total \$325.00
Comments:

This document must be prominently displayed.

VAZQUEZ, RAYMOND, QUAL.

HY-TECH SOLUTIONS, INC.
5730 2ND AVE

KEY WEST FL 33040

Oper: KEYLAB Type: CC Drawn:
Date: 7/26/17 63 Receipt no: 2331
2018 32761
CR LIC OCCUPATIONAL RENEWAL
Trans number: 1.00 \$325.00
OK CHECK 1060 311091 \$325.00
Trans date: 7/26/17 Time: 11:55:4

STATE OF FLORIDA
DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION
ELECTRICAL CONTRACTORS LICENSING BOARD

LICENSE NUMBER

EC13007833

ADDITIONAL BUSINESS QUALIFICATION

The ELECTRICAL CONTRACTOR
Named below IS CERTIFIED
Under the provisions of Chapter 489 FS.
Expiration date: AUG 31, 2018

VAZQUEZ, RAYMOND
HY-TECH SOLUTIONS, INC.
5730 2ND AVENUE
KEY WEST FL 33040



ISSUED: 01/31/2017

DISPLAY AS REQUIRED BY LAW

SEQ # L1701310001097

SPECIFICATIONS & PHOTOGRAPHS

PART 3

SPECIFICATIONS AND PHOTOGRAPHS

SUMMARY OF WORK



Summary of Work

City of Key West

ITB # 18-015 Port & Marine Services - CCTV Surveillance System - Mallory Square & Outer Mole

Hy-Tech Solutions proposes to install a CCTV system at Mallory Square and the Outer Mole Port of Entry Security Checkpoints.

The proposed system will provide CCTV coverage for the checkpoint area at Mallory Square with an overview of the area around the checkpoint. The Mallory Square cameras will be mounted on the existing archway, one fixed camera on each end of the arch and the PTZ in the middle section facing the checkpoint. The Aimetis R1016-32 NVR and all head end equipment at Mallory Square will be mounted in a NEMA-4 rated outdoor rack mount enclosure, to be located in an approved service area on the rear wall of the Waterfront Playhouse. This enclosure will include an 800 BTU air conditioning unit to control the temperature in the enclosure. Viewing at Mallory Square will be available via (1) rack mounted 19" 4k monitor, located in the enclosure. The cameras at Mallory Square are manufactured by Axis, have a 3-year manufacturer warranty, are IP66 and NEMA4X rated for harsh environments. WIFI service to be provided in the Mallory Square location by Broadwave, using existing tower and rooftop locations, including the Ocean Key House. The cameras will transmit to the NVR as well as the Outer Mole checkpoint (if necessary) via 60Ghz wireless point to point link. The Aimetis NVR will provide 30 days of video storage, integrate into the existing mobile app that is currently utilized by Key West Police Department and will allow various access levels to customize user access to each area. All components of the system will be surge protected utilizing DITEK surge products to include 110VAC protection, UPS and POE protection.

The proposed system will also provide CCTV coverage for the checkpoint area located at the entry to the Outer Mole. The Mole Pier fixed cameras will be mounted on the security office, one on each end facing the access road. This will allow coverage of the checkpoint vehicle area, staff area under the tent and the Mole Pier entry gate. The PTZ will be mounted on the existing wooden power pole that is located behind the Security office and can be utilized to view the Outer Mole Pier. The Aimetis NVR and head end equipment will be located inside the Security office and will be capable of viewing on (1) 32" 4k LED monitor at a workstation. This NVR will provide 30 days of video storage and can be expanded to include the Mallory Square cameras if necessary.

WIFI service will be provided to the Outer Mole checkpoint area by Broadwave and will be utilized for remote viewing capabilities. The app for the Outer Mole checkpoint area also will integrate with Key West Police Department. The system will be connected via 60Ghz wireless point to point using existing rooftops, power poles and approved locations (USCG marker tower). During the pre-bid walk, City Staff alluded to being allowed to use the Amphitheater roof as well, and it will be considered an option upon official approval. All components of the system will be surge protected utilizing DITEK surge products to include 110VAC protection, UPS and POE protection.

All electrical connections, conduit and rated cable are included in this proposal. The City of Key West to provide the required electrical circuits up to the breaker box or disconnect location. Hy-Tech Solutions will provide a (1) hour battery back-up on both sites and will not be liable for electrical interruptions.

SUMMARY OF WORK

WORK INCLUDED

1. The Contractor will design and furnish all CCTV Surveillance System material, equipment, machinery, and labor to accomplish the following minimum requirements for each site:

- a. **Mallory Square Security Checkpoint:**

- Axis Q3709-PVE 180 degree 4K camera and required mounts or Equal
- Ignitenet: MetroLinq 2.5G 60-19 PTP/Client antenna/radio and required mounts or Equal
- Ignitenet: MetroLinq 2.5G 60-30-18 Sector base station antenna/radio and required mounts or Equal
- Netonix WS-12-250-AC POE switch or equal
- Aimetis AIM-R1016-32 rack mount NVR and required mounts or equal
- 19" Full-HD 4K Monitor
- Wall mount weatherproof/vandal proof enclosure for NVR and monitor

- b. **Outer Mole Security Checkpoint:**

- Axis Q3709-PVE 180 degree 4K camera and required mounts or Equal
- Ignitenet: MetroLinq 2.5G 60-19 PTP/Client antenna/radio and required mounts or Equal
- Ignitenet: MetroLinq 2.5G 60-30-18 Sector base station antenna/radio and required mounts or Equal
- Netonix WS-12-250-AC POE switch or equal
- Aimetis AIM-R1016-32 rack mount NVR and required mounts or equal
- 32" Full-HD 4K Monitor

- c. **Alternate Bid:**

- Security staff monitoring stations for both Mallory Square and Outer Mole to be located at the Outer Mole checkpoint. This alternate eliminates the NVR and monitor from the Mallory square location and reduces the size of the enclosure.

- d. **General:**

- System must have remote viewing capabilities and must be fully functional for employee's computers and iPhones and other hand-held devices
- If a camera or lighting test is necessary to determine the operating parameters of the proposed camera(s), test shall be performed at the expense of the vendor.
- Vendor responsible to provide necessary electrical wiring from City's existing infrastructure to all new equipment. This wiring shall be encased in conduit.
- Vendor shall also provide, install, configure, and test a recording server adequately sized to provide thirty (30) days of recording.
- System shall include all necessary software and licenses.
- There shall not be re-occurring licensing fees.
- System shall have constant coverage of areas.

- Entire system to have battery Back-up: 8hr minimum battery life.
 - Entire system to have surge protection: 600 joules minimum.
 - System shall have viewing in color.
 - System shall be capable of withstanding harsh environment including corrosive conditions caused by saltwater and hurricane winds and/or be in protective housing.
 - System shall be capable of withstanding extreme heat
 - Cables/ wiring shall be protected from vandalism by the use of conduit or other means.
 - Cameras shall be vandal resistant.
 - Vendor to remove, and dispose of, any existing abandoned CCTV equipment.
2. Vendor will be responsible for identifying and verifying availability of locations for mounting cameras or equipment. If mounting locations are not available, Contractor will be responsible for installing mounting locations. Installation shall be included with Proposal.
 3. Vendor to provide a complete written description including system capabilities, type of cameras including brand, capability of cameras, recording ability in quality and quantity and upgrade/ expansion capabilities.
 4. Vendor to provide a complete written description including type of system and brand of stand-alone monitoring / retrieval system. Description shall include playback capability, copying to DVD, print screen ability, etc...
 5. Vendor to provide a complete system layout showing camera locations, wiring, antennas, etc.
 6. Contractor to provide cut sheets on all equipment including cameras, computers, recording devices, wiring, etc.
 7. The City is requiring the Bidder to warranty all materials and labor for two (2) years. Warranty will begin once the City determines the system is operating as specified in the technical specifications for a period of 30-days. Provide complete written description of warranty and what it covers.

During warranty period vendor shall identify and diagnose system/ equipment failures within 24 hours. All system repairs must be made within 72 hours.

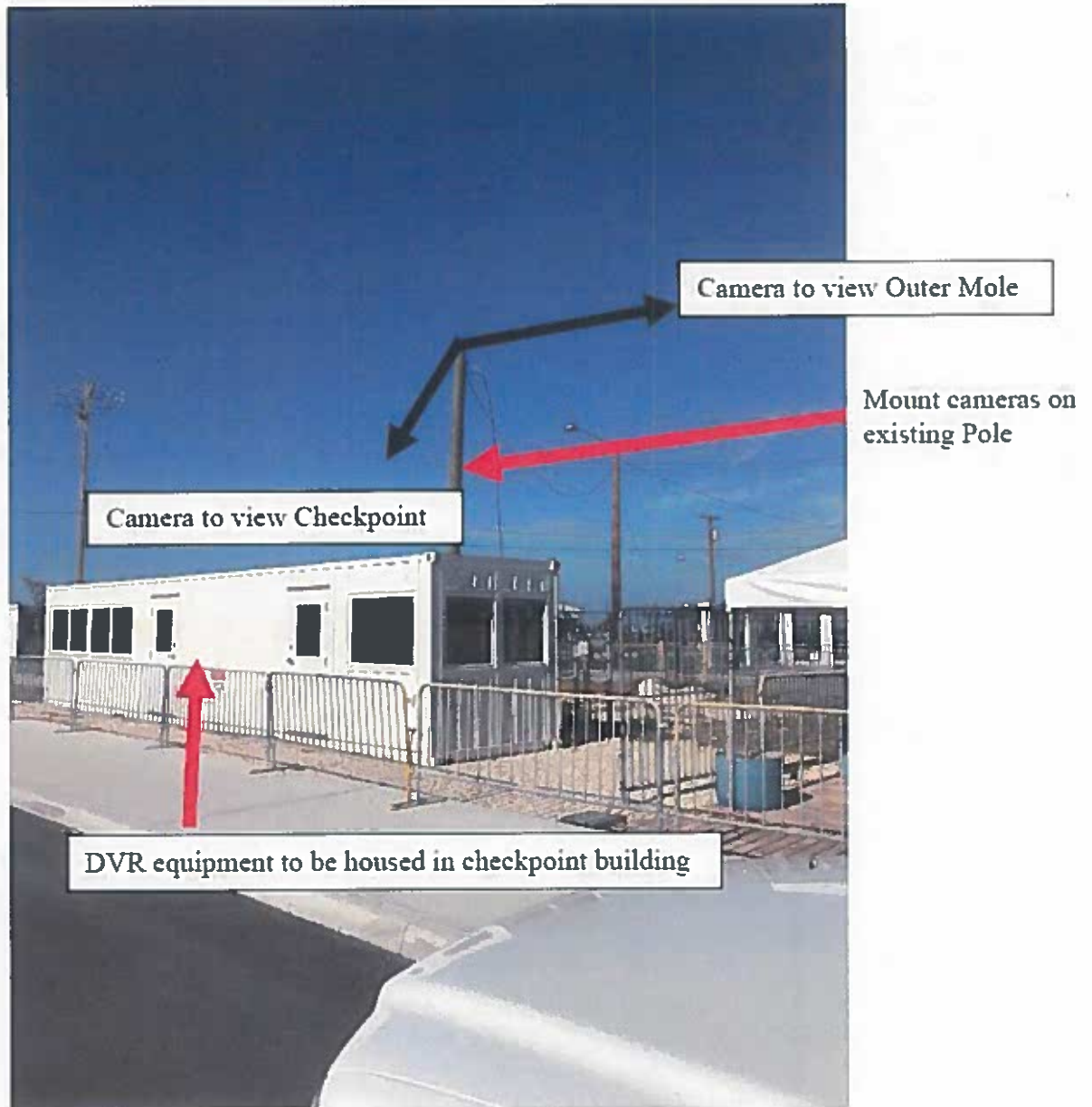
If repairs are not completed within the required 72 hours a fine of \$100/day will be imposed until repairs are made

8. Vendor to describe how the cameras, antennas, etc. will be protected in the harsh coastal environment including type of housing units.

9. Vendor to describe how the cameras, antennas, monitoring / recording equipment etc. will be protected against power surge.
10. Vendor to describe the type of training, if any, provided with the proposed system.
11. Vendor shall secure permits as necessary for proper execution and completion of the work and shall ensure that all Federal, State, and Local codes are followed.
12. Vendor shall take the necessary steps to secure the site including fencing, barricades, and/or security to prevent entry by unauthorized persons. The Port & Marine Services Director or designee shall approve security measures.
13. It shall be the Vendor's responsibility to request approval for entrance to certain areas of worksite for work on Saturdays, Sundays, holiday, and weekday hours other than 7:00 am until 5:00 pm.

PHOTOGRAPHS

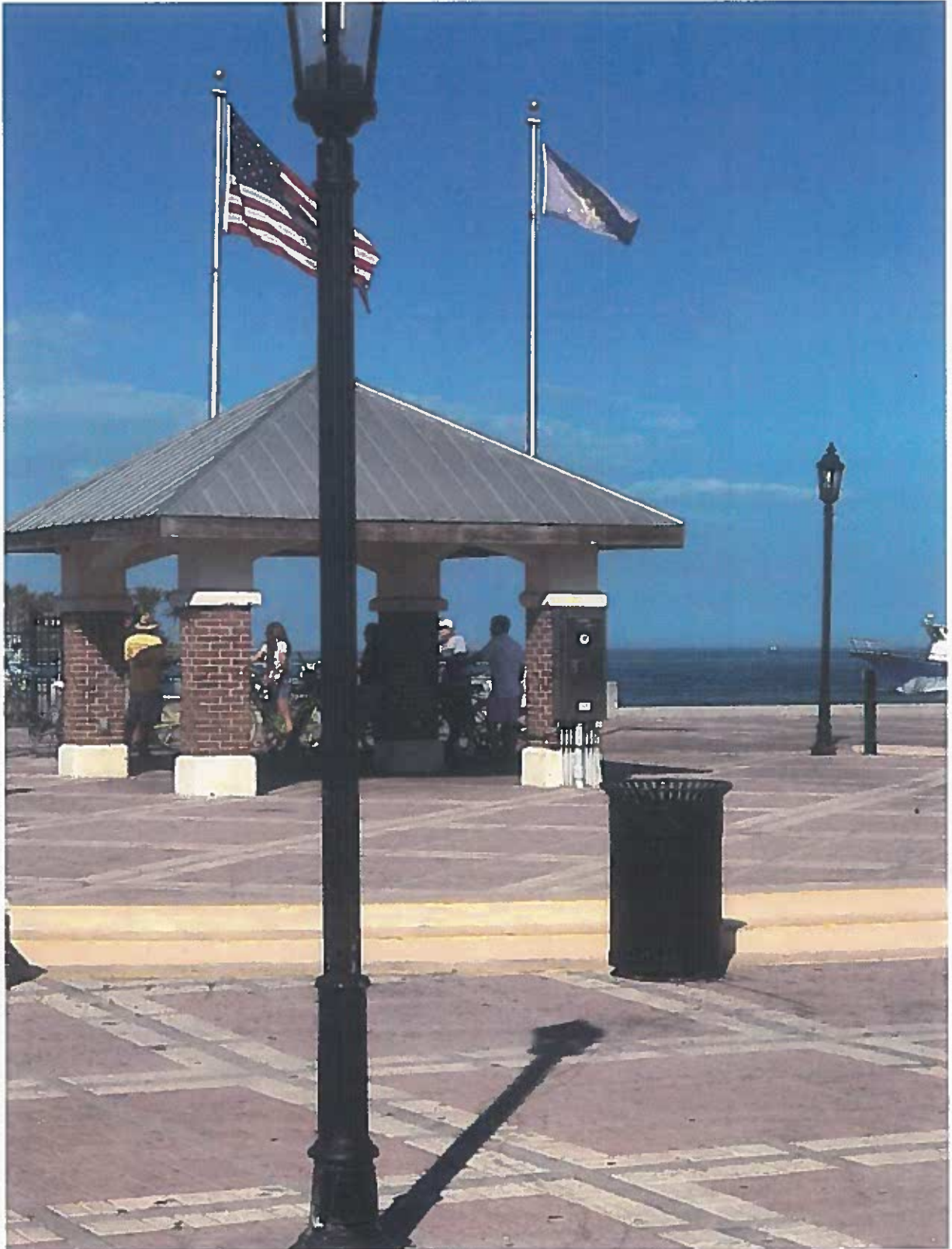
Mole Pier Security Checkpoint





Old cameras/antennas
on arches at Mallory

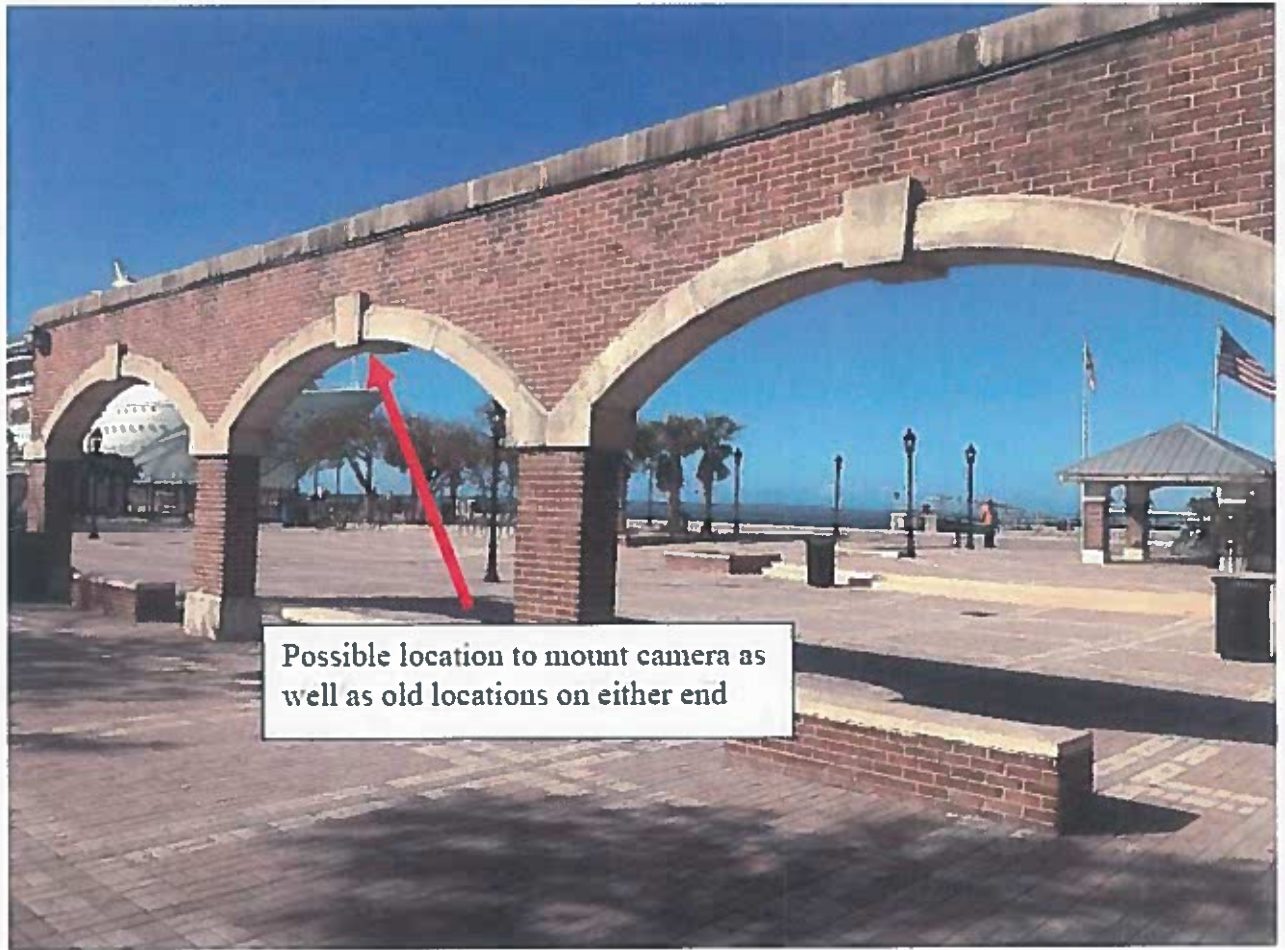
Mallory security checkpoint- cameras need to cover this area as well as Cruise Ship

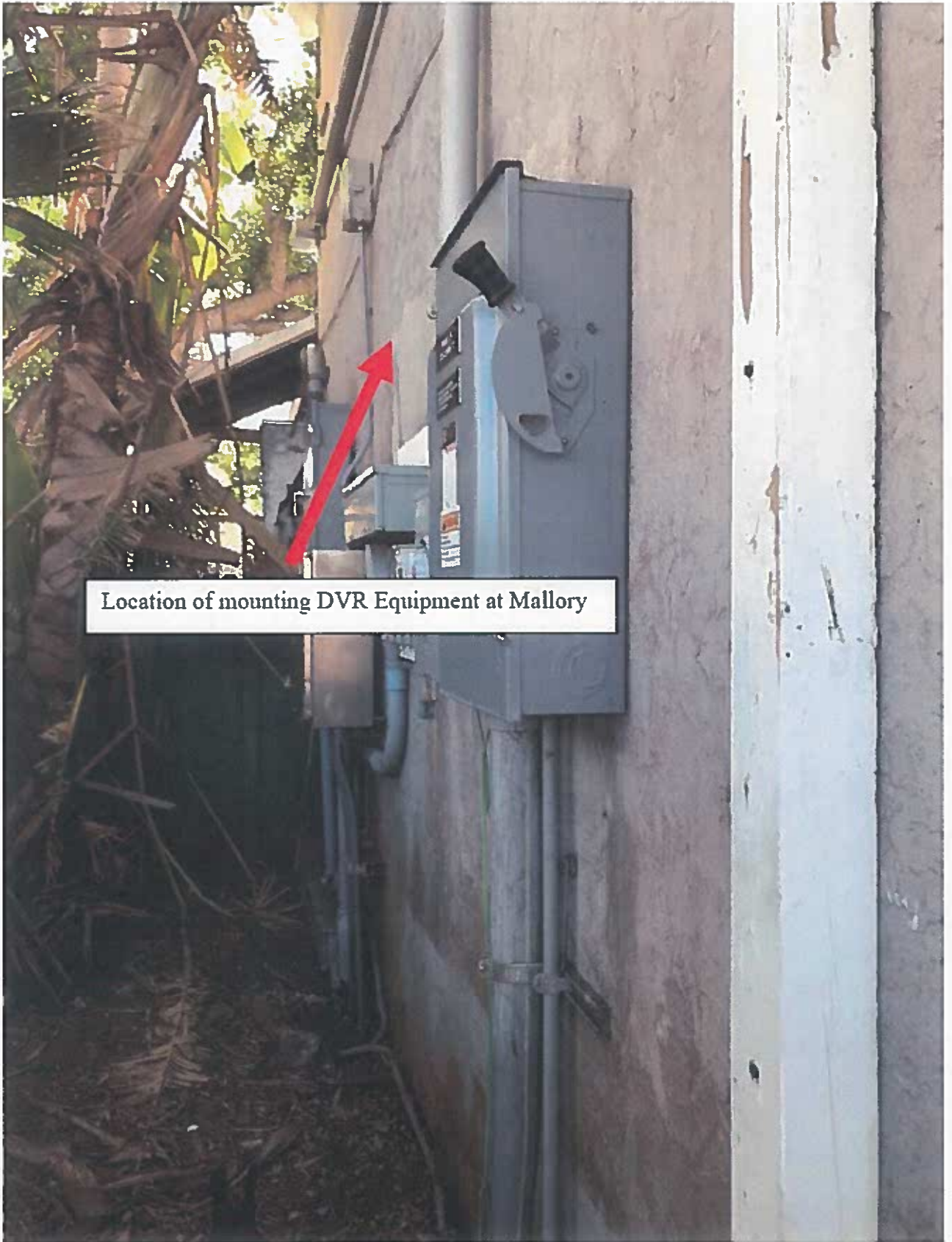


Ocean Key House-Old location of
antenna that relayed video from
Mallory to Outer Mole Security
Checkpoint



Mallory Square Arches





Location of mounting DVR Equipment at Mallory

WARRANTY INFORMATION



Warranty Information

City of Key West

ITB # 18-015 Port & Marine Services - CCTV Surveillance System - Mallory Square & Outer Mole

Hy-Tech Solutions proposes to warranty the parts and labor for the Mallory Square & Outer Mole CCTV systems for two (2) years upon system acceptance.

The following manufacturer warranties also apply:

Aimetis NVR – 3 years with next business day on site hardware replacement

Axis Communications – Cameras – 3-years

DITEK Surge Protectors – 10- years

DITEK UPS – 3-years

Ignitenet Antennas & Base Stations – 2-years

Mier Products – 30 days

Netonix Switch – 1 year

Hy-Tech Solutions will respond to system/equipment failures within 24 hours and will make system repairs within 72 hours. Hy-Tech Solutions will not warranty vandalism, terrorism or acts of God. Hy-Tech Solutions will not be responsible for any power outages that occur due to others or nature. Any failure that does not meet the warranty criteria will be subject to invoice of time and material(s) at the current service rate (\$125.00 per hour) during regular business hours or emergency rate (\$187.50 per hour) after hours or on Holidays.

EQUIPMENT CUT SHEETS

High Availability NVR for mid-sized projects

The Aimetis R1016 Network Video Recorder offers a powerful hardware package configured with enterprise class features and high storage capacity. Preloaded with Aimetis Symphony™ 7 video management software (VMS), the R1016 is equipped with hot-plug redundant power supplies and 16TB usable recording capacity in a RAID-5 array.

Available in two configurations, the R1016 is ideal for customers looking for a validated, turnkey solution with a preloaded open platform VMS that supports a wide range of IP cameras and encoders. A single CPU version is optimized for projects requiring basic recording capabilities for up to 48 cameras while the dual CPU model provides additional processing power needed for server-based analytics.

All Aimetis R-Series recorders include three years of hardware support, including next business day on-site hardware replacement service.

Key Benefits

✓ Ease of Installation and Extensive Support

The Aimetis R1016 appliance comes preconfigured with all of the necessary software and licensing to minimize installation time. Based on validated hardware components, and bundled with three years of comprehensive hardware and software support, the R1016 can be deployed and maintained worry free.

✓ Increased Availability

Redundant, hot-swap components improve NVR uptime. Continuous monitoring of key system elements, performance metrics, and health indicators provides advance notice of potential issues. System events are visible directly in the Symphony Client and optionally available through Aimetis Enterprise Manager™. When required, Aimetis will perform remote diagnostics and dispatch a technician to the site.

✓ Broad Ecosystem Support

The Aimetis R1016's capabilities can be extended through additional Aimetis products and services. Aimetis embedded analytics software is fully supported in addition to the preloaded server-based analytics, enabling a broad range of deployment scenarios. The Aimetis Thin Client™ offers a secure and convenient video viewing option in space constrained environments. Finally, Aimetis Enterprise Manager provides centralized cloud based monitoring and administration needed in multi-site deployments.

✓ Analytics Ready

With its dual CPU configuration, the R1016-32A delivers high performance computing required by server-based analytics applications. Preloaded with four Core Analytics Pack licenses, the system is optimized for a myriad of indoor and outdoor video detection applications out-of-the box. Additional analytics licenses can be added as needed.

✓ Open, Fully Featured Video Management Software

Aimetis Symphony 7 is an innovative, open platform for video management, video analytics, system integration, and alarm management. Symphony 7 offers a feature-rich, easy-to-use interface and incorporates IT-friendly features to make administration and remote health monitoring simple and scalable.

Key Features

Preloaded with Aimetis Symphony 7 Standard edition video management software

Preloaded with versatile Symphony Core Analytics Pack software (R1016-32A)

Operating System and Symphony application on dedicated solid state drive

3x 8TB hot-swappable hard drives in RAID-5 configuration (16TB usable)

Hot-swappable redundant power supplies

Support for server-based and embedded video analytics

Support for a wide range of IP cameras, encoders and IP intercoms

Viewing options include Windows client, web and iOS/Android devices

Bundled with three-years of comprehensive technical services



R1016 Network Video Recorder

R1016 Specifications

Model	R1016-32	R1016-32A
Form Factor	1U Rack Server	
CPU	Intel® Xeon® E5-2603 V4 1.7GHz	2x Intel® Xeon® E5-2620 V4 2.1GHz
RAM	8GB	16GB
Boot Drive	SSD with Windows 10 IoT Enterprise	
Video Storage	3x 8TB (16TB Usable)	
VMS Preloaded	Aimetis Symphony™ Standard Edition	
Base VMS Licenses	32*	
Base Analytics Licenses	n/a	4* Core Analytics Packs
ONVIF	ONVIF Profile S	
Storage Subsystem	RAID-5	
Disk Type	Hot-Plug SATA	
Ethernet	4x 1GbE	
Network Protocols	SNMP, SMTP	
Power Supply	Redundant Hot-Plug 550W	
Extended Storage	SAN/NAS**	
USB	4	
Operating Temperature	10°C To 35°C (50°F To 95°F)	
Dimensions	434.0 x 677.3 x 42.8 mm / 17.08 x 26.66 x 1.68 in	
Weight	Maximum Weight (With All Hard Drives/SSDs) 19.9 Kg (43.87 Lbs)	
Input Voltage	50/60 Hz 100-240 V AC, Autoranging	
Compliance	CE, FCC, RoHS	
Mounting Kit	ReadyRail Kit Provided	
Warranty	Hardware: 3 Years NBD On-site	
Part Number	AIM-R1016-32	AIM-R1016-32A

Aimetis Symphony 7 Standard Edition (32 Licenses Included)

Core Features	Unlimited client connections Web and Mobile Clients 2-way Audio Unicast, Multicast, & Multistream MJPEG / MPEG-4 / H.264 Device Pack Updates Record Locally or to Network Storage Record on Schedule, Alarm, & Continuous Automatic Software Updates Multilanguage Customizable User Access Level
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* Additional licenses sold separately
 ** Customer Supplied

Symphony Core Analytics Pack Contents (4 Licenses Included with R1016-32A)

Analytics Engine	Name
VE141	Camera Tampering
VE140	Signal Loss
VE180	Indoor People Tracking
VE180	Outdoor People and Vehicle Tracking
PT091	Auto-Pan Tilt Zoom (PTZ)
VE352	Left Item Detection
VE190	Crowd Detection

Technical Services (Three Years, Included)

Access to certified hardware and software experts
 Remote system monitoring and diagnostics
 Operating System support
 Aimetis Symphony software support
 Aimetis Symphony software upgrades
 Cloud based Symphony configuration backups
 NBD on-site parts and labor response after remote diagnostics

Ordering Information

Add-on Software Licenses	Part Number
Symphony Standard edition camera license	AIM-SYM7-S
Symphony Core Analytics Pack license	AIM-SYM7-VA-10
Aimetis Enterprise Manager	AEM is available as a SaaS subscription on a 1-5 year term

Symphony Edition Upgrades

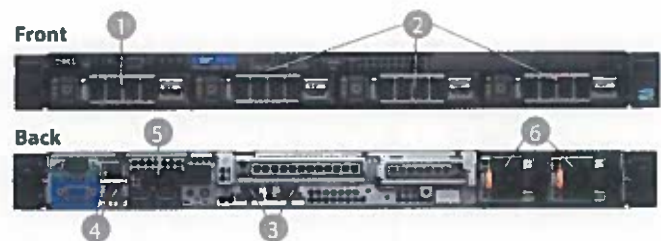
Professional (per camera)	SYM-SV-PU-1
Enterprise (per camera)	SYM-SV-EU-1

Video Analytics Licenses

Automatic License Plate Recognition (up to 4 cameras)	AIM-SYM7-VA-12
Face Recognition	AIM-SYM7-VA-14

Optional Accessories

Aimetis Thin Client™	AIM-A10D
Aimetis Operator Station	AIM-R001, AIM-R002
8TB Hot-Plug Hard Drive for R-Series NVRs	AIM-R8TB
Dual Port 10GbE NIC for R-Series NVRs	AIM-R10GE



1. 2.5" SSD for OS | 2. 3x 8TB SATA Hot-Plug HDD (RAID-5, 16TB Usable) | 3. 2x 1GbE |
 4. 2x 1GbE | 5. Management Module | 6. 2x Redundant Hot-Plug Power Supplies

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aimetis.com

**AOC LED Monitor
4K Ultra HD**

77 Series
31.5", 3840 x 2160 @60Hz

U3277PWQU



32-inch Class 4K Ultra HD Professional Monitor for Rich Details

AOC's U3277PWQU is a gorgeous 32-inch class professional monitor with 3840 x 2160 4K Ultra HD Resolution, four times the resolution of a Full HD display that takes delivering clear crisp images to the next level. This professional display also comes with two 3-watt speakers and Flicker-Free Technology for reduced eye fatigue. U3277PWQU also boasts flexibility in viewing and connections. So whether you are a designer, gamer, photographer, or someone who needs rich detail, this 4K will deliver exactly that.

Key Features

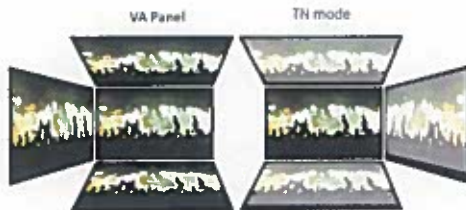
- 31.5" with 3840 x 2160 4K UHD Resolution
- VA panel for wide viewing angles
- VGA, DVI, HDMI-MHL, Display Port connectivity
- 5 total USB ports: USB 3.0 (2x with 1 being a fast-charger) and USB 2.0 (2x) ports
- Flicker-free for reduced eye fatigue
- Sleek design with full adjustability

AOC



Ultra High Definition and High Pixel Density

AOC's U3277PWQU features a 32-inch class professional, high-quality, non-glare VA panel for fast refresh. Ultra High Definition (UHD) allows users to see more on the screen at one time; it gives more 'real estate' and also shows more detail for sharper and more brilliant images. A 4K (3840 x 2160) resolution is four times a Full HD (1920 x 1080) resolution. Whether working on the next beautiful photo, design, or even just for productivity, users will appreciate the true crisp image from a UHD display.

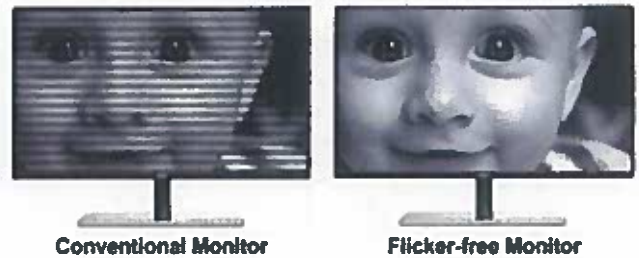


VA Panel for Wide Viewing Angles

VA panel gives 178/178 degree viewing angle while maintaining consistent image quality and colors from all viewing positions. VA panel has true 8-bit color depth that results in incredible color accuracy. The screen itself has a matte anti-glare coating that won't leave fingerprints or smudges. VA is perfect for graphic designing, video editing, photo retouching, amongst others. You can also view your spreadsheets or weekend movies from virtually any angle without compromising color uniformity.

Over 1 Billion Colors

U3277PWQU "10-bit" panel (8-bit + FRC) boasts 1.07 billion colors. The Frame-Rate-Control (FRC) technology is used to enhance the color depth of the 8-bit panel and boosting the normal 16.7 million colors found in most displays, to 1.07 billion colors. More colors means the panel can present more depth and richer color, producing more colorful and vivid images.



Flicker-Free Technology for Reduced Eye Fatigue

The normal LED-backlit monitors adjust brightness using PWM (Pulse Width Modulation). This causes flicker although human eyes can't see it easily, it still causes discomfort over long periods of time. Flicker-free technology is using DC (Direct Current) backlight system to provide more comfortable and healthy viewing.

Connectivity and Features You Need in a Monitor

This 4K monitor features VGA, DVI, HDMI-MHL, and Display Port connections. For your audio needs, this monitor comes with two 3-watt speakers and an audio line-in/headphone out. With MHL-enabled HDMI connection, you can connect your smart device to your monitor to simultaneously charge and stream your mobile multimedia on to the. You also have two USB 3.0 with one as a fast-charger, and two USB 2.0 ports for your USB needs.

Kensington Security Slot

This AOC monitor comes with a Kensington Security Slot for theft prevention. This anti-theft system allows you to secure the monitor in its place via compatible locking cable kit. Kensington Security Slot is ideal for both office and home settings.



Rich in Details for Work and Entertainment

For designers, the high definition, high pixel density provides great details for precision work such as architecture design. With the UHD resolution and large screen, CAD designers can see the big picture, spend less time scrolling in and out, and accomplish more. If you are a gamer looking to dominate or to enjoy ultimate gaming experience, the 4K resolution and 1ms fast response time will deliver.

U3277PWQU Specification

Cabinet Color	Black/Silver
Panel	TFT Active Matrix, LED Backlight, VA Panel 32" Class Widescreen, 16:9 Aspect Ratio 31.5" Viewable Image Size, Diagonal
Pixel Pitch	0.233 (H) mm x 0.233 (V) mm
Display Area	698.4 mm x 392.85 mm
Brightness	300 cd/m2 (typ)
Contrast Ratio	50,000,000:1 (dynamic)
Response Time	4ms (OD)
Viewing Angle	Horizontal: 178 Degrees (CR>10) Vertical: 178 Degrees (CR>10)
Scanning Frequency	Horizontal: 30K~99KHz (VGA, DVI-D, MHL, HDMI 1.4), 30K~160KHz (DP, HDMI 2.0) Vertical: 50~76 Hz
Optimal Resolution Recommended	1920x1080 @60Hz (VGA, MHL) 3840x2160 @30Hz (DVI-D, HDMI 1.4) 3840x2160 @60Hz (DP, HDMI 2.0)
Supported Resolutions	640x480@60/67/72/75Hz, 800x600@56/60/72/75Hz, 1024x768@60/70/72/75Hz, 1280x720@60Hz, 1280x960@60Hz, 1440x900@60Hz, 1680x1050@60Hz, 1920x1080@60Hz, 2560x1440@60Hz, 3840x2160@30Hz/60Hz
Color Depth	1.073 billion colors
Connectors	1 x VGA, 1 x DVI, 1 x HDMI-MHL, 1 x Display Port, 2 x USB 3.0 (1 x fast-charging port), 2 x USB 2.0
Audio	2 x 3-watt speakers, 1 x Line-in/Earphone-out
User Control	Source/Auto/Exit, left/Game Mode, Right/Shadow Control Menu/Enter, Power
Adjustability	Tilt: -3.5°±1.5°~+21.5±1.5°, Pivot: 90°, Swivel, Height Adjustment: 130 mm
OSD Languages	16 Languages including English, French and Spanish
Power Source	Universal 110~240VAC, 50/60Hz
Power Consumption	Power On: 27W (Typical), Standby: <0.5W
Regulations	cTUVus, CE, FCC, RoHS, Windows 8/10 compatible
Other Features	User Friendly Graphical OSD Menu, VESA 100mm Wall Mount Compliant ¹ , Kensington Security Slot, AOC's eSaver Software, i-Menu Software
Dimensions (WxHxD mm)	Monitor: 741.88 x 438.42 x 60.8 Carton: 858 x 577 x 248
Dimensions (WxHxD Inches)	Monitor: 29.2 x 17.26 x 23.94 Carton: 33.78 x 22.72 x 9.77
Weight (Net)	21.93 lbs (9.95 kgs) Net
Weight (Gross)	30.42 lbs (13.8 kgs) Gross
Loading Qty w/pallet	20' = 180 pcs.; 40' Std = 390 pcs.
UPC Code	685417714384
What's in the Box	31.5" Monitor, Power Cord, HDMI Cable, DP Cable, Audio Cable, USB Cable, Quick Start Guide

1. Wall mount arm & bracket not included. Actual product may vary from image shown on datasheet. The information contained herein is subject to change without notice. AOC shall not be liable for technical or editorial errors or omissions contained herein. All other trademarks are property of their respective owners. For more information, visit us aoc.com or call 888-838-6388

AXIS Q3709-PVE Network Camera

Multi-sensor, multi-megapixel – 180° overview. One camera.

AXIS Q3709-PVE Network Camera is a fixed dome with multiple sensors that provides a broad overview with great detail. The camera's three sensors together give a 180° panoramic view with smooth capture of movements at up to 30 fps in 3 x 4K or 20 fps in 33 MP resolution. The factory-focused lenses eliminate the need for manual focusing. The camera is effectively installed indoors or outdoors with a wide operating temperature range powered by standard PoE+. AXIS Q3709-PVE is delivered with a repaintable weather shield that protects against sun, rain or snow. The camera is equipped with video motion detection as well as active tampering alarm.

- > 180° panoramic overview provided by three sensors
- > Efficient one-camera installation
- > Factory-focused lenses
- > 3 x 4K at 30 fps or up to 33 MP resolution at 20 fps
- > Outdoor-ready with wide operating temperature range



AXIS Q3709-PVE Network Camera

Camera

Image sensor	3 x 1/2.3" progressive scan CMOS
Lens	3 x lenses, fixed focus, 5.0 mm, F2.8 Combined horizontal angle of view: 180°
Day and night	Automatically removable infrared-cut filter
Minimum illumination	Color: 2 lux, F2.8 B/W: 0.4 lux, F2.8
Shutter time	1/23250 s to 2/5 s
Camera angle adjustment	Pan +/- 180° Tilt 18°-75°

Video

Video compression	H.264 (MPEG-4 Part 10/AVC) Baseline, Main and High Profiles Motion JPEG
Resolutions	3 x (3840x2880 to 320x240)
Frame rate	3 x 4K Ultra HD: Up to 25/30 fps with power line frequency 50/60 Hz 3 x 11 MP: Up to 16/20 fps with power line frequency 50/60 Hz 3 x 5 MP (16:9): Up to 25/30 fps with power line frequency 50/60 Hz 3 x 5 MP (4:3): Up to 16/20 fps with power line frequency 50/60 Hz
Video streaming	Multiple, individually configurable streams in H.264 and Motion JPEG Controllable frame rate and bandwidth VBR/CBR H.264
Image settings	Compression, Color, Brightness, Sharpness, Contrast, White balance, Exposure control, Exposure zone, Backlight compensation, WDR – dynamic contrast, Fine tuning of behavior at low light, Text and image overlay, Privacy mask, Capture alignment
Pan/Tilt/Zoom	Digital PTZ, Preset positions, Guard tour

Network

Security	Password protection, IP address filtering, HTTPS ^a encryption, IEEE 802.1X ^a network access control, Digest authentication, User access log, Centralized Certificate Management, Cross-Origin Resource Sharing
Supported protocols	IPv4/v6, HTTP, HTTPS ^a , SSL/TLS ^a , QoS Layer 3 DiffServ, FTP, CIFS/SMB, SMTP, Bonjour, UPnP TM , SNMP v1/v2c/v3 (MIB-II), DNS, DynDNS, NTP, RTSP, RTP, SFTP, TCP, UDP, IGMP, RTCP, ICMP, DHCP, ARP, SOCKS, SSH

System integration

Application Programming Interface	Open API for software integration, including VAPIX [®] and AXIS Camera Application Platform; specifications at www.axis.com ONVIF Profile S, specification at www.onvif.org
Analytics	Video motion detection, Active tampering alarm Support for AXIS Camera Application Platform enabling installation of AXIS Video Motion Detection 3, AXJS Cross Line Detection, AXIS Digital Autotracking and third-party applications, see www.axis.com/acap
Event triggers	Analytics, Edge storage events
Event actions	File upload: FTP, SFTP, HTTP, HTTPS, network share and email Notification: email, HTTP, HTTPS, TCP and SNMP trap Video recording to edge storage Pre- and post-alarm video buffering Overlay text
Built-in installation aids	Pixel counter

General

Casing	IP66- and NEMA 4X-rated, IK10 impact-resistant aluminum casing with transparent, polycarbonate cover and dehumidifying membrane Encapsulated electronics Captive screws (resistorx 3D) Color: White NCS S1002-B For repainting instructions and impact on warranty contact your Axis partner.
Memory	3 GB RAM, 768 MB Flash
Power	Power over Ethernet IEEE 802.3at Type 2 Class 4, max. 23.1 W, typical 16.7 W
Connectors	RJ45 10BASE-T/100BASE-TX/1000BASE-T
Edge storage	Support for recording to dedicated network-attached storage (NAS)
Operating conditions	-40 °C to 55 °C (-40 °F to 131 °F) Arctic Temperature Control: Start-up as low as -40 °C (-40 °F) Humidity 10–100% RH (condensing)
Storage conditions	-40 °C to 65 °C (-40 °F to 149 °F)
Approvals	EN 55022 Class A, EN 50121-4, IEC62236-4, EN 61000-3-2, EN 61000-3-3, EN 55024, EN 61000-6-1, EN 61000-6-2, FCC Part 15 Subpart B Class A, ICES-003 Class A, VCCI Class A, C-tick AS/NZS CISPR 22 Class A, KCC KN22 Class A, KN24, IEC/EN/UL 60950-1, IEC/EN/UL 60950-22, EN 50581, IEC/EN 60529 IP66, NEMA 250 Type 4X, IEC 60068-2-1, IEC 60068-2-2, IEC 60068-2-30, IEC 60068-2-78, IEC/EN 62262 IK10
Dimensions	205 x 205 x 172 mm (8.1 x 8.1 x 6.8 in)
Weight	2.2 kg (4.8 lb) including weather shield
Included accessories	RJ45 Push-pull connector (IP66), L-key, Weather shield, Installation Guide, Windows decoder 3-user license
Optional accessories	Axis Mounts AXIS PoE+ Midspans AXIS T8604 Media Converter Switch AXIS T8129 PoE Extender AXIS T8415 Wireless Installation Tool AXIS P8221 Network I/O Audio Module RJ45 IP66-rated cables with premounted connector (Cat 6) For more accessories, see www.axis.com
Video management software	AXIS Camera Companion, AXIS Camera Station, Video management software from Axis' Application Development Partners available on www.axis.com/techsup/software
Warranty	Axis 3-year warranty and AXIS Extended Warranty option, see www.axis.com/warranty

a. This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit. (www.openssl.org), and cryptographic software written by Eric Young (ey@cryptsoft.com).

Environmental responsibility:

www.axis.com/environmental-responsibility

AXIS Q6115-E PTZ Dome Network Camera

High-end HDTV 1080p PTZ camera with Sharpdome technology

The compact, outdoor-ready AXIS Q6115-E delivers smooth HDTV 1080p video at 50/60 fps, with 30x optical zoom and autofocus. Axis Sharpdome technology provides full scene fidelity and sharp images in all directions—above as well as below the horizon. Quick and precise pan performance of over 700°/s makes it easy to change viewing position and follow fast moving objects. AXIS Q6115-E supports Wide Dynamic Range – Dynamic Capture for challenging lighting conditions. Axis Speed Dry function easily removes water drips from the dome glass, providing sharp images in rainy weather.

- > Sharpdome technology
- > Speed Dry function
- > HDTV 1080p at 50/60 fps
- > Pan performance 700° per second
- > Axis' Zipstream technology



AXIS Q6115-E PTZ Dome Network Camera

Models	AXIS Q6115-E 50 Hz AXIS Q6115-E 60 Hz	File upload via FTP, SFTP, HTTP, HTTPS, and email Notification via email, HTTP, HTTPS, and TCP
Camera		
Image sensor	1/3" Progressive Scan CMOS	Data streaming Event data
Lens	4.4–132 mm, F1.4–4.6, Horizontal field of view: 63.4°–2.3° Vertical field of view: 37.3°–1.3° Autofocus, auto-iris	Built-in installation aids Pixel counter
Day and night	Automatically removable infrared-cut filter	General
Minimum illumination	Color: 0.2 lux at 30 IRE F1.4 B/W: 0.02 lux at 30 IRE F1.4 Color: 0.3 lux at 50 IRE F1.4 B/W: 0.04 lux at 50 IRE F1.4	Casing IK08, IP66- and NEMA 4X-rated Repaintable metal casing (aluminum), Polycarbonate (PC) clear dome with Sharpdome technology
Shutter time	1/30000 s to 1 s	Sustainability PVC free
Pan/Tilt/Zoom	Pan: 360° endless, 0.05°–700°/s Tilt: +20 to -90°, 0.05°–500°/s Zoom: 30x optical, 12x digital, total 360x zoom Nadir flip, 256 preset positions, Tour recording, Guard tour, Control queue, On-screen directional indicator, Set new pan 0°, Adjustable zoom speed, Speed Dry	Memory 1 GB RAM, 256 MB Flash
Video		Power Axis High PoE midspan 1-port: 100–240 V AC, max 74 W Camera consumption: typical 10 W, max 51 W Axis PoE+ midspan 1-port: 100–240 V AC, max 37 W IEEE 802.3at Type 2 Class 4 Camera consumption: typical 10 W, max 25 W
Video compression	H.264 (MPEG-4 Part 10/AVC) Baseline, Main and High Profiles Motion JPEG	Connectors RJ45 10BASE-T/100BASE-TX PoE RJ45 Push-pull Connector (IP66)
Resolutions	1920x1080p (HDTV 1080p) to 320x180	Storage Support for SD/SDHC/SDXC card Support for recording to dedicated network-attached storage (NAS) For SD card and NAS recommendations see www.axis.com
Frame rate	Up to 25/30 fps or 50/60 fps (50/60 Hz) in all resolutions and H.264	Operating conditions With 30 W midspan: -20 °C to 50 °C (4 °F to 122 °F) With 60 W midspan: -50 °C to 50 °C (-58 °F to 122 °F) Maximum temperature (intermittent): 60 °C (140 °F) Arctic Temperature Control: Start-up as low as -40 °C (-40 °F) Humidity 10–100% RH (condensing)
Video streaming	Multiple, individually configurable streams in H.264 and Motion JPEG Axis' Zipstream technology in H.264 Controllable frame rate and bandwidth VBR/MBR H.264	Storage conditions -40 °C to 70 °C (-40 °F to 158 °F)
Image settings	Compression, color, brightness, sharpness, white balance, exposure control, exposure zones, rotation, fine tuning of behavior at low light, electronic image stabilization (EIS), manual shutter time, text and image overlay, image freeze on PTZ Defogging, backlight compensation WDR – dynamic capture: 115 dB 32 individual 3D privacy masks	Approvals EMC EN 55022 Class A, EN 55024, EN 50121-4, IEC 62236-4, EN 61000-3-2, EN 61000-3-3, EN 61000-6-1, EN 61000-6-2, FCC Part 15 Subpart B Class A, ICES-003 Class A, VCCI Class A, RCM AS/NZS CISPR22 Class A KCC KN22 Class A, KN24 Safety IEC/EN/UL 60950-1, IEC/EN/UL 60950-22 Environment IEC/EN 62262 IK08, IEC/EN 60529 IP66, NEMA 250 Type 4X, IEC 60068-2-1, IEC 60068-2-2, IEC 60068-2-78, IEC 60068-2-14, IEC 60068-2-6, IEC 60068-2-27, IEC 60068-2-30, ISO4892-2 Midspan: EN 60950-1, GS, UL, cUL, CE, FCC, VCCI, CB, KCC, UL-AR
Network		
Security	Password protection, IP address filtering, HTTPS ^a encryption, IEEE 802.1X ^a network access control, Digest authentication, User access log, Centralized Certificate Management	Dimensions 222x165x165 mm (8 3/4 x 6 1/2 x 6 1/2 in) With mounting hook: 275x165x165 mm (10 13/16 x 6 1/2 x 6 1/2 in)
Supported protocols	IPv4/v6, HTTP, HTTPS ^a , SSL/TLS ^a , QoS Layer 3 DiffServ, FTP, CIFS/SMB, SMTP, Bonjour, UPnP TM , SNMP v1/v2c/v3 (MIB-II), DNS, DynDNS, NTP, RTSP, RTP, SFTP, TCP, UDP, IGMP, RTCP, ICMP, DHCP, ARP, SOCKS, SSH, NTCIP	Weight 2.7 kg (5.9 lb)
System integration		
Application Programming Interface	Open API for software integration, including VAPIX [®] and AXIS Camera Application Platform; specifications at www.axis.com AXIS Video Hosting System (AVHS) with One-Click Connection ONVIF [®] Profiles S and G, specifications at www.onvif.org	Included accessories IP66-rated RJ45 connector kit, High PoE Midspan 1-port, Installation Guide, Windows decoder 1-user license
Analytics	Video motion detection, Active Gatekeeper, Shock detection, Autotracking Support for AXIS Camera Application Platform enabling installation of third-party applications, see www.axis.com/acap	Optional accessories AXIS T91/T94 Mounting Accessories, Axis High PoE midspans For more accessories, see www.axis.com
Event triggers	Detectors: Live Stream Accessed, Motion Detection, Shock Detection Hardware: Network, Temperature Input Signal: Manual Trigger, Virtual Inputs PTZ: Autotracking, Error, Moving, Preset Reached, Ready Storage: Disruption, Recording System: System Ready Time: Recurrence, Use Schedule	Video management software AXIS Companion, AXIS Camera Station, Video management software from Axis' Application Development Partners available on www.axis.com/techsup/software
Event actions	Overlay text, PTZ preset, guard tour, video recording to edge storage, autotracking, day/night mode, pre- and post-alarm video buffering, send SNMP Trap	Languages English, German, French, Spanish, Italian, Russian, Simplified Chinese, Japanese, Korean, Portuguese, Traditional Chinese
		Warranty Axis 3-year warranty and AXIS Extended Warranty option, see www.axis.com/warranty
a. This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit. (www.openssl.org), and cryptographic software written by Eric Young (ey@cryptsoft.com).		
Environmental responsibility: www.axis.com/environmental-responsibility		

DTK-120SRD

Series Connected Surge Protector with Dry Contacts



Product Features

- Series design for fast response and best protection
- Compact design fits in a variety of control panels
- Suitable for use on circuit breakers rated at 10kA AIC
- Multi-stage hybrid circuit design
- UL1283 EMI/RFI filtering
- LED indicates protection status
- Form C Dry Contact circuit

Application

- Fire Alarm Panels
- Control Panels
- 120VAC Single Phase Critical Loads
- UL Listed Control Panels where UL Recognized Components are Required

Accessories

- DIN Rail Mounting Kit – Part Number DTK-DRK

DITEK's **DTK-120SRD** protects dedicated 120VAC power circuits that feed control panels and other critical equipment. The hybrid series design provides maximum critical load protection, and includes dry contacts for remote notification of surge protection status. EMI/RFI filtering ensures clean power for connected equipment.

Technical Specifications

Service Voltage:	120VAC Single Phase
MCOV:	150VAC
Protection Modes:	All modes – L-G, L-N, N-G
Voltage Protection Rating:	600V L-G, L-N, 1,000V N-G
Surge Current Rating:	50,000 Amps
Max. Continuous Current:	20 Amps
SCCR:	10kA
Nominal Discharge Current Rating (I_n):	10kA
Operation Frequency:	40Hz – 400Hz
EMI/RFI Filtering Attenuation:	Up to 35dB, 100kHz -100MHz

Mechanical Characteristics

Connection Method:	Hardwired, series configuration
Housing:	ABS
Operating Temperature:	-40°F - 185°F (-40°C - 85°C)
Maximum Humidity:	95% non-condensing
Dimensions:	6.87"L x 3.5W x 2.5"H (174050mm x 88.90mm x 63.50mm)
Weight:	12.16 oz (0.35kg)

Quality, Standards & Approval

Agency Approvals:	UL1449 4 th Edition, cUL, UL1283
SPD Type:	Type 2 Component Assembly
Standards Compliance:	IEEE C62.41.1 -2, IEEE C62.45
Warranty:	Ten Year Limited Warranty

Every precaution has been taken to ensure that this literature is accurate and complete. DITEK Corporation assumes no responsibility and disclaims all liability for damages resulting from the use of this information or for any errors or omissions.

One DITEK Center 1720 Starkey Road - Largo, FL 33771
Phone: 1-800-753-2345 Direct: 727-812-5000
Technical Support: 1-888-472-6100
www.diteksurgeprotection.com

Doc. Number: SPS-100007-005 Rev 5 10/17
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DTK-MRJPOE

Power over Ethernet Surge Protection



Product Features

- Uses SAD and GDT technologies for optimal protection
- Data speeds up to 10GbE without signal degradation
- PoE Plus, HiPoE ready for high-wattage applications
- RJ45 connections with external grounding screw
- Complies with IEEE Std. 802.3af and 802.3at for PoE

Applications

- PoE IP Camera, NVR's
- Wireless Access Points
- Audio/Video Touch Pads and Screens
- Access Control

Accessories

- DIN Rail Mounting Kit – Part Number DTK-DRK

Category	Max Data Transmission Speed	Max Bandwidth	Typical Distance
CAT3	10 Mbps	16 MHz	100 m
CAT5	10 / 100 Mbps	100 MHz	100 m
CAT5e	1 Gbps	100 MHz	100 m
CAT6	1 Gbps	250 MHz	100 m
CAT6A	10 Gbps	500 MHz	100 m

* Cabling information obtained from TIA-568-C.2

DITEK's DTK-MRJPOE protects circuits that use state-of-the-art Power over Ethernet connections. This point of use surge protector is compatible with CAT5e, CAT6 and CAT6A cabling infrastructure, and can be installed either at the equipment end, or ahead of injectors or midspan devices. Its multi-stage, hybrid design provides superior protection for PoE applications.

Technical Specifications

Service Voltage:	<60V
Protection Modes:	L-G (All), L-L (All)
Clamping Voltage Common Mode (L-G):	75V
Clamping Voltage Differential Mode (L-L):	72V
Surge Current Rating:	20kA/Pair
Max. Continuous Current:	1.5 Amps
Power Handling:	144 Watts
Data Rate:	Up To 10GbE

Mechanical Characteristics

Connection Method:	RJ45 In/Out
Housing:	ABS
Operating Temperature:	-40F – 158F (-40C – 70C)
Maximum Humidity:	95% non-condensing
Dimensions:	3.0"L X 1.7"W x 1.2"H (76mm x 43mm x 30mm)
Weight:	4oz (113g)

Quality, Standards & Approval

Agency Approvals:	UL497B
Standards Compliance:	CAT5e, EIA/TIA568A, EIA/TIA568B
Warranty:	Ten Year Limited Warranty



DTK-UPS Series

On-Line Uninterruptible Power Supplies – Tower/Rack Mount



DITEK's DTK-UPS Series combines robust surge protection with on-line double conversion Uninterruptible Power Supply technology to enable your equipment to survive even the harshest power quality issues. From surges and spikes to brownouts and complete power loss, the DTK-UPS Series will keep your equipment up and running when it matters most. DITEK's industry proven UPS products provide cost-effective and reliable performance for network servers, video surveillance systems, back office computers and similar mission critical equipment.

Product Features

- Online double conversion technology provides superior equipment protection
- Rack/Tower models available in 1kVA, 1.5kVA, 2kVA and 3kVA
- Mounting rails included with 2kVA and 3kVA models
- Easily converts from rack to tower profile
- Invisible transitioning between AC and battery
- Intuitive LCD display
- USB and Ethernet interfaces available on all models
- Software provided for remote monitoring
- SNMP Card included with all "E" models
- Supports auto shutdown when battery is depleted
- External battery pack available for extended run time

Applications

- Network Servers
- Video Surveillance Systems
- Back Office Computers
- PC-based phone systems
- Point of Sale Devices

Accessories

- Extended Battery Packs
 - DTK-UXB1000R for 1kVA models
 - DTK-UXB1500R for 1.5kVA models
 - DTK-UXB2000R for 2kVA models
 - DTK-UXB3000R for 3kVA models
- SNMP Card (included with "E" models)
 - DTK-UETH1
- Mounting Rails (included with 1kVA & 2kVA models)
 - DTK-URK1
- Replacement Battery

Every precaution has been taken to ensure that this literature is accurate and complete. DITEK Corporation assumes no responsibility and disclaims all liability for damages resulting from the use of this information or for any errors or omissions.



DTK-UPS Series

On-Line Uninterruptible Power Supplies – Tower/Rack Mount



Technical Specifications

Part Number:	DTK-UPS1000R	DTK-UPS1500RE	DTK-UPS2000RE	DTK-UPS3000RE
Capacity:	1000VA, 900W	1500VA, 1350W	2000VA, 1800W	3000VA, 2700W
INPUT – Voltage Rating and Required Power				
Voltage Rating:	100*/110*/115*/120/127VAC			
Required Power:	15A	15A	20A	30A
Low Line Transfer:	80VAC / 70VAC / 60VAC / 55VAC ± 5%			
Low Line Comeback:	(based on load percentage 100% - 80% / 80% - 70% / 70% - 60% / 60% - 0)			
High Line Transfer:	80VAC / 75VAC / 65VAC / 60VAC ± 5%			
High Line Comeback:	150VAC ± 5%			
Frequency Range:	140VAC ± 5%			
Power Factor:	50Hz / 60Hz			
	≥ 0.99 at normal voltage			
OUTPUT				
Output Voltage:	100*/110*/115*/120/127VAC			
AC Voltage Regulation:	± 1%			
Frequency Range:	47 ~ 53Hz or 57 ~ 63Hz (Synchronized Range) / 50Hz ± 0.5% or 60Hz ± 0.5% (Battery Mode)			
Current Crest Ratio (CF):	3:1 (Max.)			
Harmonic Distortion (THDU):	≤ 2% (Linear Load) - ≤ 4% (Non-Linear Load)			
Transfer Time:	AC TO DC: Zero - INVERTER TO BYPASS: 4 ms (typical)			
Waveform (Battery Mode):	Pure Sine wave			
OUTLETS				
Programmable (non-critical loads):	2 15A	2 15A	4 15A/20A	2 15A/20A
Receptacles (mission-critical loads):	2 15A	2 15A	4 15A/20A	2 15A/20A, 1 30A
EFFICIENCY				
AC Mode:	90%	90%	91%	91%
Battery Mode:	88%	89%	88%	90%
BATTERY				
Battery Type – Quantity:	12V/9Ah - 2	12V/9Ah - 3	12V/9Ah - 4	12V/9Ah - 6
Typical Recharge Time:	4 hours recover to 90% capacity (for standard models)			
Battery Runtime (100% Load):	2 min, 45 sec	2 min, 55 sec	4 min, 45 sec	4 min, 50 sec
(50% Load):	9 min, 30 sec	10 min, 05 sec	8 min, 30 sec	12 min, 50 sec
Runtime with Extended Battery Pack (100% Load):	15 min	16 min	16 min	16 min
(50% Load):	38 min	39 min	39 min	38 min
INDICATORS				
LCD:	UPS Status, Load Level, Battery Level/Info, Input/Output Info, Discharge Time, Fault Indicators			
Alarm Sounding:	BATTERY MODE: every 4 seconds - LOW BATTERY: every second OVERLOAD: twice every second - FAULT: continuously			
PHYSICAL				
Dimensions (LxWxH):	16.14" x 17.24" x 3.46"	16.14" x 17.24" x 3.46"	20.10" x 17.24" x 3.46"	24.80" x 17.24" x 3.46"
Weight:	29.10 lbs	31.97 lbs	47.18 lbs	65.26 lbs
ENVIRONMENTAL				
Humidity:	20 – 90% RH @ 0 - 40°C (non-condensing)			
Noise Level:	< 50dBA @ 1 Meter			
MANAGEMENT				
Smart RS-232/USB:	Compatible with Windows 2000/2003/XP/Vista/2008/7/10, Linux, Unix, MAC			
Optional SNMP:	Power management from SNMP Manager and web browser – included with models ending in E			
QUALITY, STANDARDS & APPROVAL				
Agency Approvals:	UL1778, cUL			
Warranty:	3 Year Limited Warranty			

*Derate capacity to 95% when output is adjusted to 115VAC, to 90% when adjusted to 110VAC, and to 80% when adjusted to 100VAC



35cm size w/ 60GHz + 5GHz



19cm size w/ 60GHz + 5GHz

MetroLinq™ 2.5G 60

Cloud-Enabled Outdoor 60GHz PTP + 5GHz

IgniteNet's™ MetroLinq™ 2.5G 60 is the world's first cost-effective high capacity 60GHz PTP radio enabling high performance, interference-free connections worldwide. The MetroLinq™ 2.5G 60 has an added advantage of being license-free in most markets globally, allowing ultra fast deployment and without the hassle of other frequency bands requiring a license. The MetroLinq™ also includes a second 5GHz radio which can be configured as PtP (backup) to provide integrated redundancy without additional hardware or complexity.

Interference-Free & Unlicensed Band

The IgniteNet™ MetroLinq™ 2.5G 60 offers unprecedented performance - combining both the benefits of unlicensed band operation with no interference!

Dual Band 60GHz & 5GHz Operation

The MetroLinq™ 2.5G 60 includes a second 5GHz radio which can be configured as a backup to the 60GHz to provide automatic failover during adverse conditions. This allows links to be extended further without affecting link availability.

Powerful, Flexible Configuration

The MetroLinq™ 2.5G 60 can operate either as a stand-alone device or as a coordinated, cloud-managed device, easily meeting the requirements of any installation.

Robust Weather-Resistant Design

The MetroLinq™ 2.5G 60 features a hybrid metal/plastic design built to withstand the harshest environments including precipitation, hot/cold weather and high/low humidities.

Product Variants

- › 35cm size/ 60GHz + 5GHz
- › 19cm size/ 60GHz + 5GHz

Features

HARDWARE FEATURES

- › 1x 2.5 Gigabit Ethernet Port (PoE IN 24-48v)
- › 1x SFP Port
- › 1x Screw Terminal Block (DC Power IN 24-48v)
- › 1x USB 3.0 Port
- › Dual flash image support

LEDs

- › Power, Ethernet, Wireless, Health/Status

DIMENSIONS (L x W x H)

- › 350 x 350 x 200 mm/ 13.78 x 13.78 x 7.87 inch (ML2-60-35)
- › 190 x 190 x 120 mm/ 7.48 x 7.48 x 4.72 inch (ML2.5-60-19)

WEIGHT

- › 2.8 kg/ 6.17 lb without mount (ML2.5-60-35)
- › 1.25 kg/ 2.76 lb without mount (ML2.5-60-19)

POWER

- › 24-48V/1.5A passive Gigabit PoE or DC

OPERATING ENVIRONMENT

- › Operating Temperature: -30C. to 55C.
- › Store Temperature: -30C. to 55C.
- › Operating Humidity: 10 to 90% non-condensing (RH)

REGULATORY / STANDARDS COMPLIANCE

- › FCC/IC
- › CE

RF PERFORMANCE (TX)

- › 60GHz:
14dBm @ 4.62Gbps
- › 5GHz:
27dBm @ 6Mbps, 23dBm @ 866 Mbps

RF PERFORMANCE (RX)

- › 60GHz:
-74dBm @MCS1; -60dBm @ MCS9
- › 5GHz:
-94dBm @MCS0; -72dBm @ MCS15

KEY FEATURES

- › 2.5+ Gbps Aggregate throughput; dynamically allocated (60GHz)
- › Management VLAN support and VLAN pass-through
- › Supports Service Provider and Enterprise type networks
- › Stand-alone or Cloud-controlled operating modes
- › Link failover/backup (60GHz + 5GHz) Per Client
- › 128bit AES Encryption (standard; 5GHz, and 60GHz)
- › SNMP Monitoring with Private MIB

APPLICATIONS

- › Fixed Wireless Access (broadband)
- › 3G/4G Backhaul
- › Metro WiFi
- › Campus Interconnection
- › Hybrid Fiber/Wireless Networks

Ordering Information

Part Number	Description
ML2.5-60-35-XX	60GHz Outdoor + 5GHz w/ Int 42dBi (60GHz) & 22dBi (5GHz) antenna, 2500Mbps + SFP
ML2.5-60-35-1-XX	60GHz Outdoor + 5GHz w/ Int 42dBi (60GHz) & External 5Ghz, 2500Mbps + SFP
ML2.5-60-19-XX	60GHz Outdoor + 5GHz w/ Int 36dBi (60GHz) & 16dBi (5GHz) antenna, 2500Mbps + SFP
ML2.5-60-19-1-XX	60GHz Outdoor + 5GHz w/ Int 36dBi (60GHz) & External 5GHz, 2500Mbps + SFP

**XX is used to denote localization (US, EU, AU, CN)

Rack Products

Protect your electronics, NVRs/DVRs, game consoles, and rack-mountable equipment from vandals and Mother Nature!

BW-RACKACHT (AC, Heat)

OUTDOOR - NEMA 4 enclosure includes a 2000 BTU AC unit, 500-watt heater and an internal 19" rack. 120 volts AC. Draws 17 amps at start-up, and 7 amps running.

- External dimensions: 22"W x 24"/12RU x 24"D
- Internal dimensions: 21.5"W x 23.5"H x 24"D
- Internal rack: 19"W x 12RU x 20"D

BW-RACKACE (AC)

Same unit as above without a heater

BW-RACK8ACHT

Same enclosure with a smaller 800 BTU AC unit and a smaller 150-watt heater

BW-RACK8ACE

Same enclosure with a smaller 800 BTU AC unit, but no heater

Outdoor BW-RACKFC (fan ventilated)

NEMA 3R enclosure includes a 315 cubic ft/minute fan, filters, rain shrouds, and an internal 19" rack. 120 volts AC. Draws 0.5 amps running.

ATTENTION: To keep NEMA Ratings on the enclosures above, installers must strictly follow the OEM installation instructions and use water-tight fittings on all openings.

NEW BW-4RURACKBOX (fan ventilated)

INDOOR - NEMA 1 wall-mount rack enclosure includes our BW-4RURACK vertical rack accessory. 24"W x 30"H x 8"D

BW-RACKBOX (fan ventilated)

INDOOR - NEMA 1 enclosure Includes a 315 cubic foot/min. fan and an internal 19" rack. 120 volts AC. Draws 0.5 amps running.

BW-RACKCART (fan ventilated)

Same unit as above with four wheels (pictured right)



For an optional window in the door, add a "W" at the end of the part number for any of these enclosures.



Rack Accessories

NEW BW-4RURACK

- Vertical 19" 4RU Rack
- Free standing, wall-mountable, or mounts in many of Mier's large outdoor enclosures



BW-230 Rack-Mountable Fan-Ventilated NVR Lockbox

- 5RU - 17.73"W x 8.1"H x 24"D
- Rated at 100 lb capacity
- 120V continuous-duty fan
- Includes hardware



BW-235

- Same unit as above but slightly smaller
- 3RU - 17.73"W x 5.1"H x 24"D
- Rated at 50 lb capacity

BW-5RU Rack-Mount Shelf

- 19"W x 8"H x 24"D includes hardware



BW-3RU Rack-Mount Shelf

- 19"W x 5"H x 24"D includes hardware

BW-2RU Rack-Mount Shelf

- 19"W x 3"H x 24"D includes hardware

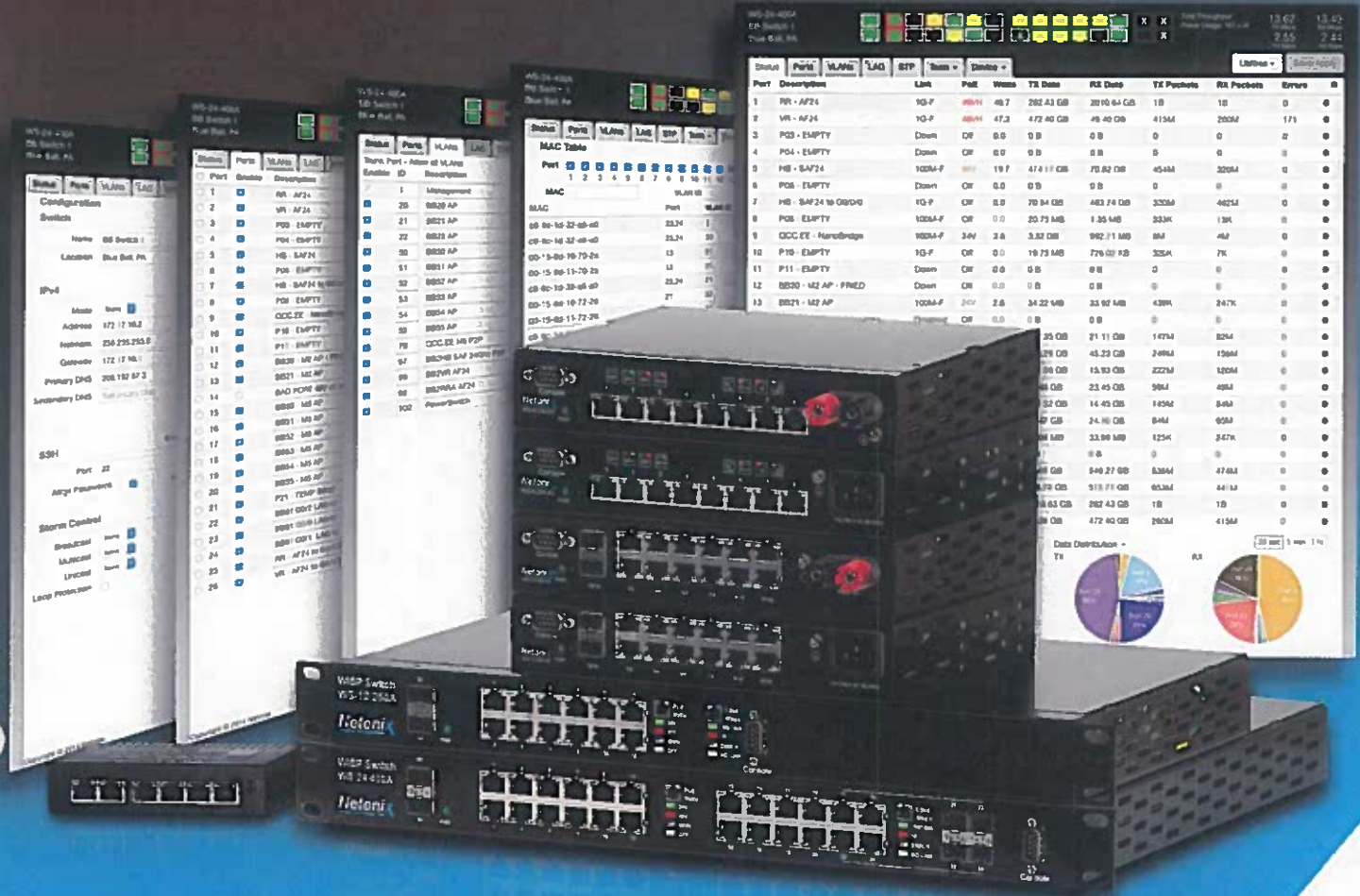
BW-RMD1 Rack-Mount Drawer

- 2RU - 18"W x 4.1"H x 24"D
- Store remotes, instructions, etc. for your rack equipment under lock and key!



Carrier Grade

Spec Sheet
Quick Start



Models

WS-24-400A
WS-24-400B
WS-12-250A
WS-12-250B
WS-12-250-DC
WS-12-250-AC
WS-12-DC
WS-10-250-AC
WS-8-250-DC
WS-8-250-AC
WS-8-150-DC
WS-8-150-AC
WS-6-MINI

Netonix®

WISP Switch™

Managed PoE+ Gigabit Switches with SFP

- Gigabit Ethernet RJ45 and SFP Ports
- Non-Blocking Throughput Switching Performance
- Software Configurable Passive PoE
- Powers airFIBER™ and other high end radios

Introduction

The Netonix® WISP Switch™ product line was designed specifically for the WISP industry with a rugged chassis and extended operating temperature range. It features a simple yet powerful user interface providing the software features WISPs need in a switch.

Software Features

- LAG – Port aggregation LACP/Static
- STP / RSTP / MSTP (MSTP available with firmware v2.0)
- Port mirroring and remote monitoring via Wire Shark with CPSP
- VLAN dot1Q/QinQ/Port Trunking
- SNMP - complete statistical reporting
- SMTP alerts - configurable
- Bandwidth limiting per port
- Ping watch dog per port
- Scheduled port bouncing
- Cable Diagnostics
- Loop Protection
- DHCP Snooping
- IGMP Snooping
- Flow Control - with back pressure
- Storm Control
- Multicast Filtering
- Port Isolation
- Auto TFTP Backup on Config Change
- UDP - Ubiquiti Discovery Protocol
- CDP - Cisco Discovery Protocol
- Security - access control list and login tarpit

The WISP Switch™ features the ability to power many popular 24V, 48V/50V passive PoE devices from many manufacturers including the Ubiquiti Networks® airMAX™, UniFi™, SAF™, MIMOSA™, Ligowav™, and airFIBER™ product lines.

Configuration Interface

To access the Configuration Web User Interface perform the following steps:

- Ensure that your computer is connected to one of the ports on the WISP Switch™.
- Configure the Ethernet adapter on your host system with a static IP address in the 192.168.1.x subnet (e.g., 192.168.1.10).
- Launch your web browser and type <https://192.168.1.20> in the address field and press enter.
- The login screen should appear.
- Enter "admin" in the Username and Password fields then click Login.

The Configuration Interface should appear, allowing you to configure your WISP Switch™.

Specifications - WS-24-400A

Manufactured and Assembled	North America
Standard 19" rack mount / Desktop / Wall mount	YES
Dimensions	438mm x 44mm x 356mm
Weight	5kg
Power Input	210-230 & 110-120 VAC
Chassis Earth Ground Lug	YES
Max. Power Consumption	400 Watts
Intelligent Forced Air Cooling With Fan RPM Monitoring	YES
Switch Core and PHYs	Vitesse
Processor	MIPS 24K 416 MHz
System Memory	128 MB
Flash Storage	16 MB
Total Non-Blocking Line Rate	26 Gbps
Certifications	CE, FCC, IC
Operating Temperature	-25 to 55°C (-13 to 131° F)
Operating Humidity	5 to 95% Non-Condensing
Console Port	RS-232
Ethernet Ports	(24) 10/100/1000 Ethernet Ports (2) SFP Ports
Passive PoE Configured Per Port via UI	24V 0.75A pins 4,5(+) 7,8(-) 48V 0.75A pins 4,5(+) 7,8(-) 48VH 1.5A pins 1,2,4,5(+) 3,6,7,8(-)
PoE Out Voltage Range	48-50 VDC / 22-24 VDC
Passive PoE Current Sensors Per Port	YES
ESD Rating	24 kV Air / 24 kV Contact

24V PoE Ports Pins 4,5 (+) Pins 7,8 (-) .75A	48V PoE Ports Pins 4,5 (+) Pins 7,8 (-) .75A	48VH PoE Ports Pins 1,2,4,5 (+) Pins 3,6,7,8 (-) 1.5A
Ports 01-24	Ports 01-24	Ports 01-04

*RevD and newer boards



Specifications - WS-24-400B

Manufactured and Assembled	North America
Standard 19" rack mount / Desktop / Wall mount	YES
Dimensions	438mm x 44mm x 356mm
Weight	5kg
Power Input	210-230 & 110-120 VAC
Chassis Earth Ground Lug	YES
Max. Power Consumption	400 Watts
Intelligent Forced Air Cooling With Fan RPM Monitoring	YES
Switch Core and PHYs	Vitesse
Processor	MIPS 24K 416 MHz
System Memory	128 MB
Flash Storage	16 MB
Total Non-Blocking Line Rate	26 Gbps
Certifications	CE, FCC, IC
Operating Temperature	-25 to 55°C (-13 to 131° F)
Operating Humidity	5 to 95 % Non-Condensing
Console Port	RS-232
Ethernet Ports	(24) 10/100/1000 Ethernet Ports (2) SFP Ports
Passive PoE Configured Per Port via UI	24V 0.75A pins 4,5(+) 7,8(-) 48V 0.75A pins 4,5(+) 7,8(-) 48VH 1.5A pins 1,2,4,5(+) 3,6,7,8(-)
PoE Out Voltage Range	48-50 VDC / 22-24 VDC
Passive PoE Current Sensors Per Port	YES
ESD Rating	24 kV Air / 24 kV Contact

24V PoE Ports Pins 4,5 (+) Pins 7,8 (-) .75A	48V PoE Ports Pins 4,5 (+) Pins 7,8 (-) .75A	48VH PoE Ports Pins 1,2,4,5 (+) Pins 3,6,7,8 (-) 1.5A
Ports 01-24	Ports 01-12	Ports 01-02

*RevD and newer boards



Specifications - WS-12-250A

Manufactured and Assembled	North America
Standard 19" rack mount / Desktop / Wall mount	YES
Dimensions	438mm x 44mm x 229mm
Weight	3 kg
Power Input	210-230 & 110-120 VAC
Chassis Earth Ground Lug	YES
Max. Power Consumption	250 Watts
Intelligent Forced Air Cooling With Fan RPM Monitoring	YES
Switch Core and PHYs	Vitesse
Processor	MIPS 24K 416 MHz
System Memory	128 MB
Flash Storage	16 MB
Total Non-Blocking Line Rate	14 Gbps
Certifications	CE, FCC, IC
Operating Temperature	-25 to 55°C (-13 to 131° F)
Operating Humidity	5 to 95% Non-Condensing
Console Port	RS-232
Ethernet Ports	(12) 10/100/1000 Ethernet Ports (2) SFP Ports
Passive PoE Configured Per Port via UI	24V 0.75A pins 4,5(+) 7,8(-) 48V 0.75A pins 4,5(+) 7,8(-) 48VH 1.5A pins 1,2,4,5(+) 3,6,7,8(-)
PoE Out Voltage Range	48-50 VDC / 22-24 VDC
Passive PoE Current Sensors Per Port	YES
ESD Rating	24 kV Air / 24 kV Contact

24V PoE Ports Pins 4,5 (+) Pins 7,8 (-) .75A	48V PoE Ports Pins 4,5 (+) Pins 7,8 (-) .75A	48VH PoE Ports Pins 1,2,4,5 (+) Pins 3,6,7,8 (-) 1.5A
Ports 01-12	Ports 01-12	Ports 01-04

*RevD and newer boards



Specifications - WS-12-250B

Manufactured and Assembled	North America
Standard 19" rack mount / Desktop / Wall mount	YES
Dimensions	438mm x 44mm x 229mm
Weight	3 kg
Power Input	210-230 & 110-120 VAC
Chassis Earth Ground Lug	YES
Max. Power Consumption	250 Watts
Intelligent Forced Air Cooling With Fan RPM Monitoring	YES
Switch Core and PHYs	Vitesse
Processor	MIPS 24K 416 MHz
System Memory	128 MB
Flash Storage	16 MB
Total Non-Blocking Line Rate	14 Gbps
Certifications	CE, FCC, IC
Operating Temperature	-25 to 55°C (-13 to 131° F)
Operating Humidity	5 to 95% Non-Condensing
Console Port	RS-232
Ethernet Ports	(12) 10/100/1000 Ethernet Ports (2) SFP Ports
Passive PoE Configured Per Port via UI	24V 0.75A pins 4,5(+) 7,8(-) 48V 0.75A pins 4,5(+) 7,8(-) 48VH 1.5A pins 1,2,4,5(+) 3,6,7,8(-)
PoE Out Voltage Range	48-50 VDC / 22-24 VDC
Passive PoE Current Sensors Per Port	YES
ESD Rating	24 kV Air / 24 kV Contact

24V PoE Ports Pins 4,5 (+) Pins 7,8 (-) .75A	48V PoE Ports Pins 4,5 (+) Pins 7,8 (-) .75A	48VH PoE Ports Pins 1,2,4,5 (+) Pins 3,6,7,8 (-) 1.5A
Ports 01-12	Ports 01-06	Ports 01-02

*RevD and newer boards



Specifications - WS-12-250-DC

Manufactured and Assembled	North America
Standard 19" rack mount / Desktop / Wall mount	YES
Dimensions	223mm x 181mm x 44mm
Weight	2 kg
Power Input	9-60 VDC
Chassis Earth Ground Lug	YES
Max. Power Consumption	N/A
Intelligent Forced Air Cooling With Fan RPM Monitoring	YES
Switch Core and PHYs	Vitesse
Processor	MIPS 24K 416 MHz
System Memory	128 MB
Flash Storage	16 MB
Total Non-Blocking Line Rate	14 Gbps
Certifications	CE, FCC, IC
Operating Temperature	-25 to 55°C (-13 to 131° F)
Operating Humidity	5 to 95% Non-Condensing
Console Port	RS-232
Ethernet Ports	(12) 10/100/1000 Ethernet Ports (2) SFP Ports
Passive PoE Configured Per Port via UI	24V 1A pins 4,5(+) 7,8(-) 48V 1A pins 4,5(+) 7,8(-) 24VH 2A pins 1,2,4,5(+) 3,6,7,8(-) 48VH 2A pins 1,2,4,5(+) 3,6,7,8(-)
PoE Out Voltage Range	48-50 VDC / 22-24 VDC
Passive PoE Current Sensors Per Port	YES
ESD Rating	24 kV Air / 24 kV Contact

24V PoE Ports Pins 4,5 (+) Pins 7,8 (-) 1A	48V PoE Ports Pins 4,5 (+) Pins 7,8 (-) 1A	24VH PoE Ports Pins 1,2,4,5 (+) Pins 3,6,7,8 (-) 2A	48VH PoE Ports Pins 1,2,4,5 (+) Pins 3,6,7,8 (-) 2A
Ports 01-12	Ports 01-12	Ports 01-04	Ports 01-04



Specifications - WS-12-250-AC

Manufactured and Assembled	North America
Standard 19" rack mount / Desktop / Wall mount	YES
Dimensions	223mm x 181mm x 44mm
Weight	2 kg
Power Input	210-230 & 110-120 VAC
Chassis Earth Ground Lug	YES
Max. Power Consumption	250 Watts
Intelligent Forced Air Cooling With Fan RPM Monitoring	YES
Switch Core and PHYs	Vitesse
Processor	MIPS 24K 416 MHz
System Memory	128 MB
Flash Storage	16 MB
Total Non-Blocking Line Rate	14 Gbps
Certifications	CE, FCC, IC
Operating Temperature	-25 to 55°C (-13 to 131° F)
Operating Humidity	5 to 95 % Non-Condensing
Console Port	RS-232
Ethernet Ports	(12) 10/100/1000 Ethernet Ports (2) SFP Ports
Passive PoE Configured Per Port via UI	24V 1A pins 4,5(+) 7,8(-) 48V 1A pins 4,5(+) 7,8(-) 24VH 2A pins 1,2,4,5(+) 3,6,7,8(-) 48VH 2A pins 1,2,4,5(+) 3,6,7,8(-)
PoE Out Voltage Range	48-50 VDC / 22-24 VDC
Passive PoE Current Sensors Per Port	YES
ESD Rating	24 kV Air / 24 kV Contact

24V PoE Ports Pins 4,5 (+) Pins 7,8 (-) 1A	48V PoE Ports Pins 4,5 (+) Pins 7,8 (-) 1A	24VH PoE Ports Pins 1,2,4,5 (+) Pins 3,6,7,8 (-) 2A	48VH PoE Ports Pins 1,2,4,5 (+) Pins 3,6,7,8 (-) 2A
Ports 01-12	Ports 01-12	Ports 01-04	Ports 01-04



Specifications - WS-12-DC

Manufactured and Assembled	North America
Standard 19" rack mount / Desktop / Wall mount	YES
Dimensions	223mm x 122mm x 44mm
Weight	1 kg
Power Input	37-53 VDC
Chassis Earth Ground Lug	YES
Max. Power Consumption	8+/- watts not including PoE
Intelligent Forced Air Cooling With Fan RPM Monitoring	YES
Switch Core and PHYs	Vitesse
Processor	MIPS 24K 416 MHz
System Memory	128 MB
Flash Storage	16 MB
Total Non-Blocking Line Rate	14 Gbps
Certifications	CE, FCC, IC
Operating Temperature	-25 to 55°C (-13 to 131° F)
Operating Humidity	5 to 95% Non-Condensing
Console Port	RS-232
Ethernet Ports	(12) 10/100/1000 Ethernet Ports (2) SFP Ports
Passive PoE Configured Per Port via UI	24V .75 pins 4,5(+) 7,8(-) 48V .75 pins 4,5(+) 7,8(-) 24VH 1.5A pins 1,2,4,5(+) 3,6,7,8(-) 48VH 1.5A pins 1,2,4,5(+) 3,6,7,8(-)
PoE Out Voltage Range	48-50 VDC / 22-24 VDC
Passive PoE Current Sensors Per Port	YES
ESD Rating	24 kV Air / 24 kV Contact

24V PoE Ports Pins 4,5 (+) Pins 7,8 (-) .75A	48V PoE Ports Pins 4,5 (+) Pins 7,8 (-) .75A	24VH PoE Ports Pins 1,2,4,5 (+) Pins 3,6,7,8 (-) 1.5A	48VH PoE Ports Pins 1,2,4,5 (+) Pins 3,6,7,8 (-) 1.5A
Ports 01-12	Ports 01-12	Ports 01-04	Ports 01-04



Specifications - WS-10-250-AC

Manufactured and Assembled	North America
Standard 19" rack mount / Desktop / Wall mount	YES
Dimensions	223mm x 181mm x 44mm
Weight	2 kg
Power Input	210-230 & 110-120 VAC
Chassis Earth Ground Lug	YES
Max. Power Consumption	250 Watts
Intelligent Forced Air Cooling With Fan RPM Monitoring	YES
Switch Core and PHYs	Vitesse
Processor	MIPS 24K 416 MHz
System Memory	128 MB
Flash Storage	16 MB
Total Non-Blocking Line Rate	10 Gbps
Certifications	CE, FCC, IC
Operating Temperature	-25 to 55°C (-13 to 131° F)
Operating Humidity	5 to 95% Non-Condensing
Console Port	RS-232
Ethernet Ports	(8) 10/100/1000 Ethernet Ports (2) SFP Ports
Passive PoE Configured Per Port via UI	24V .75A pins 4,5(+) 7,8(-) 48V .75A pins 4,5(+) 7,8(-) 24VH 1.5A pins 1,2,4,5(+) 3,6,7,8(-) 48VH 1.5A pins 1,2,4,5(+) 3,6,7,8(-)
PoE Out Voltage Range	48-50 VDC / 22-24 VDC
Passive PoE Current Sensors Per Port	YES
ESD Rating	24 kV Air / 24 kV Contact

24V PoE Ports Pins 4,5 (+) Pins 7,8 (-) .75A	48V PoE Ports Pins 4,5 (+) Pins 7,8 (-) .75A	24VH PoE Ports Pins 1,2,4,5 (+) Pins 3,6,7,8 (-) 1.5A	48VH PoE Ports Pins 1,2,4,5 (+) Pins 3,6,7,8 (-) 1.5A
Ports 01-08	Ports 01-08	Ports 01-02	Ports 01-02



Specifications - WS-8-250-DC

Manufactured and Assembled	North America
Standard 19" rack mount / Desktop / Wall mount	YES
Dimensions	223mm x 181mm x 44mm
Weight	2 kg
Power Input	9-60 VDC
Chassis Earth Ground Lug	YES
Max. Power Consumption	N/A
Intelligent Forced Air Cooling With Fan RPM Monitoring	YES
Switch Core and PHYs	Vitesse
Processor	MIPS 24K 416 MHz
System Memory	128 MB
Flash Storage	16 MB
Total Non-Blocking Line Rate	14 Gbps
Certifications	CE, FCC, IC
Operating Temperature	-25 to 55°C (-13 to 131° F)
Operating Humidity	5 to 95% Non-Condensing
Console Port	RS-232
Ethernet Ports	(8) 10/100/1000 Ethernet Ports
Passive PoE Configured Per Port via UI	24V 0.75A pins 4,5(+) 7,8(-) 48V 0.75A pins 4,5(+) 7,8(-) 48VH 1.5A pins 1,2,4,5(+) 3,6,7,8(-)
PoE Out Voltage Range	48-50 VDC / 22-24 VDC
Passive PoE Current Sensors Per Port	YES
ESD Rating	24 kV Air / 24 kV Contact

24V PoE Ports Pins 4,5 (+) Pins 7,8 (-) .75A	48V PoE Ports Pins 4,5 (+) Pins 7,8 (-) .75A	48VH PoE Ports Pins 1,2,4,5 (+) Pins 3,6,7,8 (-) 1.5A
Ports 01-08	Ports 01-08	Ports 01-02



Specifications - WS-8-250-AC

Manufactured and Assembled	North America
Standard 19" rack mount / Desktop / Wall mount	YES
Dimensions	223mm x 181mm x 44mm
Weight	2 kg
Power Input	210-230 & 110-120 VAC
Chassis Earth Ground Lug	YES
Max. Power Consumption	250 Watts
Intelligent Forced Air Cooling With Fan RPM Monitoring	YES
Switch Core and PHYs	Vitesse
Processor	MIPS 24K 416 MHz
System Memory	128 MB
Flash Storage	16 MB
Total Non-Blocking Line Rate	14 Gbps
Certifications	CE, FCC, IC
Operating Temperature	-25 to 55°C (-13 to 131° F)
Operating Humidity	5 to 95% Non-Condensing
Console Port	RS-232
Ethernet Ports	(8) 10/100/1000 Ethernet Ports
Passive PoE Configured Per Port via UI	24V 0.75A pins 4,5(+) 7,8(-) 48V 0.75A pins 4,5(+) 7,8(-) 48VH 1.5A pins 1,2,4,5(+) 3,6,7,8(-)
PoE Out Voltage Range	48-50 VDC / 22-24 VDC
Passive PoE Current Sensors Per Port	YES
ESD Rating	24 kV Air / 24 kV Contact

24V PoE Ports	48V PoE Ports	48VH PoE Ports
Pins 4,5 (+)	Pins 4,5 (+)	Pins 1,2,4,5 (+)
Pins 7,8 (-)	Pins 7,8 (-)	Pins 3,6,7,8 (-)
.75A	.75A	1.5A
Ports 01-08	Ports 01-08	Ports 01-02



Specifications - WS-8-150-DC

Manufactured and Assembled	North America
Standard 19" rack mount / Desktop / Wall mount	YES
Dimensions	191mm x 178mm x 44mm
Weight	2 kg
Power Input	9-72 VDC
Chassis Earth Ground Lug	YES
Max. Power Consumption	N/A
Intelligent Forced Air Cooling With Fan RPM Monitoring	YES
Switch Core and PHYs	Vitesse
Processor	MIPS 24K 416 MHz
System Memory	128 MB
Flash Storage	16 MB
Total Non-Blocking Line Rate	14 Gbps
Certifications	CE, FCC, IC
Operating Temperature	-25 to 55°C (-13 to 131° F)
Operating Humidity	5 to 95% Non-Condensing
Console Port	RS-232
Ethernet Ports	(8) 10/100/1000 Ethernet Ports
Passive PoE Configured Per Port via UI	24V 0.75A pins 4,5(+) 7,8(-) 48V 0.75A pins 4,5(+) 7,8(-) 48VH 1.5A pins 1,2,4,5(+) 3,6,7,8(-)
PoE Out Voltage Range	48-50 VDC / 22-24 VDC
Passive PoE Current Sensors Per Port	YES
ESD Rating	24 kV Air / 24 kV Contact

24V PoE Ports	48V PoE Ports	48VH PoE Ports
Pins 4,5 (+)	Pins 4,5 (+)	Pins 1,2,4,5 (+)
Pins 7,8 (-)	Pins 7,8 (-)	Pins 3,6,7,8 (-)
.75A	.75A	1.5A
Ports 01-06	Ports 01-06	Port 01



Specifications - WS-8-150-AC

Manufactured and Assembled	North America
Standard 19" rack mount / Desktop / Wall mount	YES
Dimensions	206mm x 165mm x 44mm
Weight	2 kg
Power Input	110-120 VAC
Chassis Earth Ground Lug	YES
Max. Power Consumption	250 Watts
Intelligent Forced Air Cooling With Fan RPM Monitoring	YES
Switch Core and PHYs	Vitesse
Processor	MIPS 24K 416 MHz
System Memory	128 MB
Flash Storage	16 MB
Total Non-Blocking Line Rate	14 Gbps
Certifications	CE, FCC, IC
Operating Temperature	-25 to 55°C (-13 to 131° F)
Operating Humidity	5 to 95% Non-Condensing
Console Port	RS-232
Ethernet Ports	(8) 10/100/1000 Ethernet Ports
Passive PoE Configured Per Port via UI	24V 0.75A pins 4,5(+) 7,8(-) 48V 0.75A pins 4,5(+) 7,8(-) 48VH 1.5A pins 1,2,4,5(+) 3,6,7,8(-)
PoE Out Voltage Range	48-50 VDC / 22-24 VDC
Passive PoE Current Sensors Per Port	YES
ESD Rating	24 kV Air / 24 kV Contact

24V PoE Ports	48V PoE Ports	48VH PoE Ports
Pins 4,5 (+)	Pins 4,5 (+)	Pins 1,2,4,5 (+)
Pins 7,8 (-)	Pins 7,8 (-)	Pins 3,6,7,8 (-)
.75A	.75A	1.5A
Ports 01-08	Ports 01-08	Port 01



Specifications - WS-6-MINI

















Manufactured and Assembled	North America
Desktop / Wall mount	YES
Dimensions	127mm x 118mm x 32mm
Weight	1 kg
Power Input	37-53 VDC
Chassis Earth Ground Lug	YES
Max. Power Consumption	2A
Switch Core and PHYs	Vitesse
Processor	MIPS 24K 416 MHz
System Memory	128 MB
Flash Storage	16 MB
Total Non-Blocking Line Rate	6 Gbps
Certifications	CE, FCC, IC
Operating Temperature	-25 to 55°C (-13 to 131° F)
Operating Humidity	5 to 95% Non-Condensing
Ethernet Ports	(6) 10/100/1000 Ethernet Ports
Passive PoE Configured Per Port via UI	24V 0.75A pins 4,5(+) 7,8(-) 48V 0.75A pins 4,5(+) 7,8(-) 24VH 1.5A pins 1,2,4,5(+) 3,6,7,8(-) 48VH 1.5A pins 1,2,4,5(+) 3,6,7,8(-)
PoE Out Voltage Range	48-50 VDC / 22-24 VDC
Passive PoE Current Sensors Per Port	YES
ESD Rating	24 kV Air / 24 kV Contact

24V PoE Ports	48V PoE Ports	24VH PoE Ports	48VH PoE Ports
Pins 4,5 (+)	Pins 4,5 (+)	Pins 1,2,4,5 (+)	Pins 1,2,4,5 (+)
Pins 7,8 (-)	Pins 7,8 (-)	Pins 3,6,7,8 (-)	Pins 3,6,7,8 (-)
.75A	.75A	1.5A	1.5A
Ports 03-06	Ports 03-06	Port 02	Port 02






Port 1 PoE "IN" 37-53 VDC up to 2A using all 4 pairs.

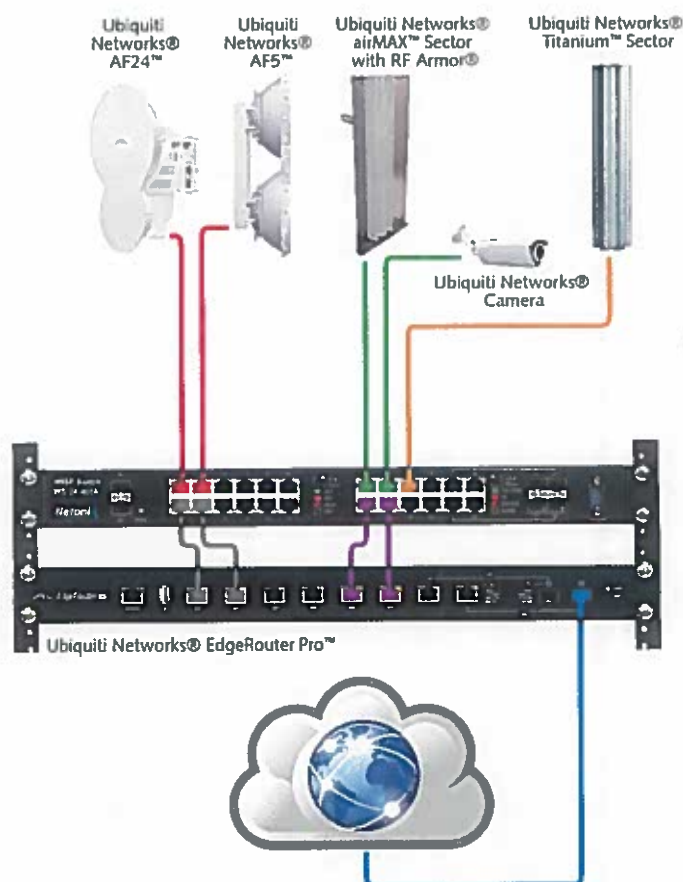


802.3af Standards A and B & Passive PoE

PINS	T568A Color	T568B Color	Passive PoE 24V 48V	Passive PoE 48VH	10/100 Mixed DC & Data (mode A)	1000 (1 Gigabit) DC & Bi-Data (mode B)	1000 (1 Gigabit) DC & Bi-Data (mode A)
1	 white/green stripe	 white/orange stripe		DC+	Rx+ DC+	TxRx A+	TxRx A+ DC+
2	 green solid	 orange solid		DC+	Rx- DC+	TxRx A-	TxRx A- DC+
3	 white/orange stripe	 white/green stripe		DC-	Tx+ DC-	TxRx B+	TxRx B+ DC-
4	 blue solid	 blue solid	DC+	DC+	Unused	TxRx C+ DC+	TxRx C+
5	 white/blue stripe	 white/blue stripe	DC+	DC+	Unused	TxRx C- DC+	TxRx C-
6	 orange solid	 green solid		DC-	Tx- DC-	TxRx B-	TxRx B- DC-
7	 white/brown stripe	 white/brown stripe	DC-	DC-	Unused	TxRx D+ DC-	TxRx D+
8	 brown solid	 brown solid	DC-	DC-	Unused	TxRx D- DC-	TxRx D-

Sample Deployment

-  **Passive PoE 24V .75A/1A**
Pins 4,5 + 7,8 -
-  **Passive PoE 48V .75A/1A**
Pins 4,5 + 7,8 -
-  **Passive PoE 48V 1.5A/2A**
Pins 1,2,4,5 + 3,6,7,8 -
Ports configured with private VLANs working as Mid Span PoE injectors - for airFiber™ units.
airFiber™ back hauls to OSPF Routed Interfaces on EdgeRouter™.
-  **1Gbps FD**
-  **2 Gbps Aggregated LACP 802.3ad**
This is the trunk for sector and camera VLANs.



All other trademarks mentioned are the property of their respective owners and are not associated with Netonix®.

Safety Notices

Read, follow, and keep these instructions.

Heed all warnings.

Only use attachments/accessories specified by Netonix®.

 **WARNING:** Do not use this product near water.

 **WARNING:** Avoid using this product during an electrical storm.
There may be a remote risk of electric shock, injury, or death from lightning.

Electrical Safety Information

Compliance is required with respect to voltage, frequency, and current requirements indicated on the manufacturer's label. Connection to a different power source than those specified may result in improper operation, damage to the equipment or pose a fire hazard if the limitations are not followed.

There are no operator serviceable parts inside this equipment. Service should be provided only by a qualified service technician.

This equipment is provided with a detachable power cord which has an integral safety ground wire intended for connection to a grounded safety outlet.

Always connect an additional earth ground to the grounding lug at the back of the chassis.

Do not substitute the power cord with one that is not the provided approved type. Never use an adapter plug to connect to a 2-wire outlet as this will defeat the continuity of the grounding wire.

The equipment requires the use of the ground wire as a part of the safety certification; modification or misuse can provide a shock hazard that can result in serious injury or death.

Contact a qualified electrician or the manufacturer if there are questions about the installation prior to connecting the equipment.

Protective earth ground is provided by Listed AC adapter. Building installation shall provide appropriate short-circuit backup protection.

Protective bonding must be installed in accordance with local and national wiring rules and regulations.

General Warranty

Netonix, LLC ("Netonix®") represents and warrants that the products furnished hereunder shall be free from defects in material and workmanship for a period of one (1) year from the date of shipment by Netonix® under normal use and operation. Netonix® sole and exclusive obligation under the foregoing warranty shall be to repair or replace, at its sole discretion, any defective product that fails during the warranty period.

The expense or removal and reinstallation of any item are not included in this warranty.

The warranty is exclusive and in lieu of all other warranties, express or implied, including the implied warranties of merchantability and fitness for a particular purpose and any warranties arising from a course of dealing, usage or trade practice with respect to the products. Repair or replacement in the manner provided herein shall be the sole and exclusive remedy of the buyer for breach of warranty and shall constitute fulfillment of all liabilities of Netonix with respect to the quality and performance of the products.

Netonix® reserves the right to inspect all defective products, which must be returned by buyer to Netonix® freight prepaid.

No products will be accepted for replacement or repair without obtaining a Return Materials Authorization (RMA) number from Netonix®. Products returned without an RMA number will not be processed and may be discarded.

Netonix® shall have no obligation to make repairs or replacement necessitated by catastrophe, fault, negligence, misuse, abuse, or accident by buyer, buyer's customers or any other parties.

The warranty period of any repaired or replaced product shall not extend beyond its original term.

Warranty Conditions

The warranty shall apply only if:

- The product has not been subjected to misuse, neglect or unusual physical, electrical or electromagnetic stress, or some other type of accident.
- No modification, alteration or addition has been made to the product by persons other than Netonix® authorized representatives or otherwise approved by Netonix®.
- The product has been properly installed and used at all times in accordance, and in all material respects, with the applicable Product documentation.
- All Ethernet cabling runs use CAT5 (or above) and is shielded cabling with and ESD drain wire and ESD RJ-45 end/connector.

Returns

In the unlikely event a defect occurs, please work through the dealer or distributor from which this product was purchased.

Disclaimer:

Netonix® does not warrant that the operation of the products is error-free or that operation will be uninterrupted. In no event shall Netonix® be responsible for damages or claims of any nature or description relating to system performance, including coverage, buyer's selection of products for buyer's application and/or failure of products to meet government or regulatory requirements.

Compliance



Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This device complies with **Part 15 of the FCC Rules**; operation is subject to the following conditions:

- This device may not cause harmful interference.
- This device must accept any interference received, including interference that may cause undesired operation.

NOTE: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to **Part 15 of the FCC Rules**. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to other radio electronic equipment. Operations of this equipment in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at his own expense.

IC Industry Canada

This Class A digital apparatus complies with Canadian ICES-003.

This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following conditions:

- This device may not cause interference.
- This device must accept any interference, including interference that may cause undesired operation of the device.



Australia and New Zealand

Warning: This is a Class A product. In a domestic environment this product may cause radio interference, in which case the user may be required to take adequate measures.

CE CE Marking

CE marking on this product represents the product is in compliance with all directives that are applicable to it.



RoHS/WEEE Compliance Statement

European Directive 2002/96/EC requires that the equipment bearing this symbol on the product and/or its packaging must not be disposed of with unsorted municipal waste. The symbol indicates that this product should be disposed of separately from regular household waste streams. It is your responsibility to dispose of this and other electric and electronic equipment via designated collection facilities appointed by the government or local authorities. Correct disposal and recycling will help prevent potential negative consequences to the environment and human health. For more detailed information about the disposal of your old equipment, please contact your local authorities, waste disposal service, or the shop where you purchased the product.

Declaration of Conformity

Cesky [Czech]

Netonix ® prohlašuje, tento přístroj je ve shodě se základními požadavky a příslušnými ustanoveními směrnice 1999/5/ES.

Dansk [Danish]

Netonix ® verklaar hierbij dit apparaat voldoet aan de essentiële eisen en de relevante bepalingen van richtlijn 1999/5/EG.

Nederlands [Dutch]

Netonix ® verklaart hierbij dit apparaat voldoet aan de essentiële eisen en de relevante bepalingen van richtlijn 1999/5/EG.

English

Netonix® hereby declares this device is in compliance with the essential requirements and relevant provisions of Directive 1999/5/EC.

Eesti [Estonian]

Netonix ® kinnitab selle seadme vastavust põhinõuetele ja asjakohastele direktiivi 1999/5/EÜ.

Suomi [Finnish]

Netonix ® vakuuttaa tämmä laite on yhdenmukainen olennaisten vaatimusten ja sitä koskevien direktiivin 1999/5/EY.

Français [French]

Netonix ® déclare ce dispositif est conforme aux exigences essentielles et aux dispositions pertinentes de la directive 1999/5/CE.

Deutsch [German]

Netonix ® erklärt hiermit, dieses Gerät in Übereinstimmung mit den grundlegenden Anforderungen und relevanten Vorschriften der Richtlinie 1999/5/EG erfüllt.

ελληνικά [Greek]

Netonix ® δηλώνει αυτή η συσκευή είναι σύμφωνη με τις βασικές απαιτήσεις και τις σχετικές διατάξεις της οδηγίας 1999/5/EK.

Netonix ® dīlonei afti i syskeyj einai sýmfonj me tis vasikés apaitiseis kai tis schetikés diatáxeis tjs odigias 1999/5/EK.

Magyar [Hungarian]

Netonix ® ezúton kijelenti, ez a készülék megfelel az alapvető követelményeknek, valamint a vonatkozó 1999/5/EC irányelv.

Íslenska [Icelandic]

Netonix ® lýsir þetta tæki er í samræmi við grunnkröfur og viðeigandi ákvæði tilskipunar 1999/5/EB.

Italiano [Italian]

Netonix ® dichiara questo dispositivo è conforme ai requisiti essenziali e le disposizioni pertinenti della direttiva 1999/5/CE.

Latviski [Latvian]

Ar šo Netonix ® apliecina šī ierīce atbilst pamatprasībām un attiecīgajiem Direktīvas 1999/5/EK.

Lietuviškai [Lithuanian]

Netonix ® pareiškia, šis prietaisas yra laikomasi esminių reikalavimų ir atitinkamų Direktyvos 1999/5/EB nuostatas.

Malti [Maltese]

Netonix ® hawnhekk tiddikjara dan l-apparat huwa konformi mar-rekwiżiti essenzjali u d-dispożizzjonijiet rilevanti tad-Direttiva 1999/5/KE.

Norsk [Norwegian]

Netonix ® erklærer herved denne enheten er i samsvar med de grunnleggende krav og relevante krav i direktiv 1999/5/EF.

Slovensky [Slovak]

Netonix ® prehlasuje, tento prístroj je v zhode so základnými požiadavkami a príslušnými ustanoveniami smernice 1999/5/ES.

Svenska [Swedish]

Netonix ® förklarar härmed denna enhet är i överensstämmelse med de grundläggande kraven och relevanta bestämmelser i direktiv 1999/5/EG.

Español [Spanish]

Netonix ® declara por este dispositivo cumple con los requisitos esenciales y las disposiciones relevantes de la Directiva 1999/5/CE.

Polski [Polish]

Netonix ® oświadcza, urządzenie to jest zgodne z zasadniczymi wymaganiami oraz odpowiednimi postanowieniami dyrektywy 1999/5/WE.

Português [Portuguese]

Netonix ® declara este dispositivo está em conformidade com os requisitos essenciais e as disposições da Directiva 1999/5/CE.

Română [Romanian]

Netonix ® declară acest dispozitiv este în conformitate cu cerințele esențiale și dispozițiile relevante ale Directivei 1999/5/CE.

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All other trademarks mentioned are the property of their respective owners and are not associated with Netonix.

Compact surveillance workstations

Aimetis Operator Stations are preloaded with the Aimetis Symphony™ client and engineered for surveillance applications supporting up to 4K video. These small-footprint viewing stations complement Aimetis R-Series Network Video Recorders (NVRs) to create a high performing end-to-end surveillance solution.

Operator Stations are available in two versions, each ideal for customers seeking a preconfigured and validated video surveillance client. The R001 model can support three displays simultaneously and is optimized for everyday video monitoring applications. With an enhanced graphics engine and support for four simultaneous monitors, the R002 model will satisfy the most demanding display requirements.

Each Aimetis R-Series Operator Station is bundled with three years of hardware support, including next business day on-site replacement service.

Key Benefits

✓ Ease of Installation and Extensive Support

Each Operator Station comes preconfigured with all of the necessary software and licensing to minimize installation time. Based on validated hardware components and backed by three years of comprehensive hardware and software support, Operator Stations can be deployed and maintained worry free.

✓ Enhanced Security Option

Operator Stations have been hardened and preloaded with Aimetis Kiosk™. This software provides an option to enforce vital lockdown security for Windows PCs running Aimetis Symphony. Aimetis Kiosk restricts users from accessing the desktop and OS while providing a secure replacement shell that allows access to specific applications only.

✓ All-Around Performance in Space-Saving Form Factor

With 6th generation Intel® Core™ processors and support for three (R001) or four (R002) displays, Operator Stations offer strong performance in a small form factor. They can decode up to 4K video and drive multiple 25-view displays simultaneously.

Key Features

Preloaded with Aimetis Symphony client software

Preloaded with Aimetis Kiosk software

Small, space-saving desktop form factor

Support for 4K video

Support for three (R001) or four (R002) monitors

Bundled with three years of comprehensive technical services

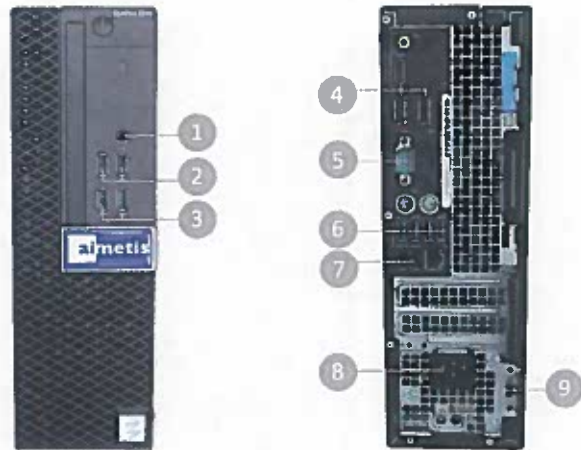


Operator Station Specifications

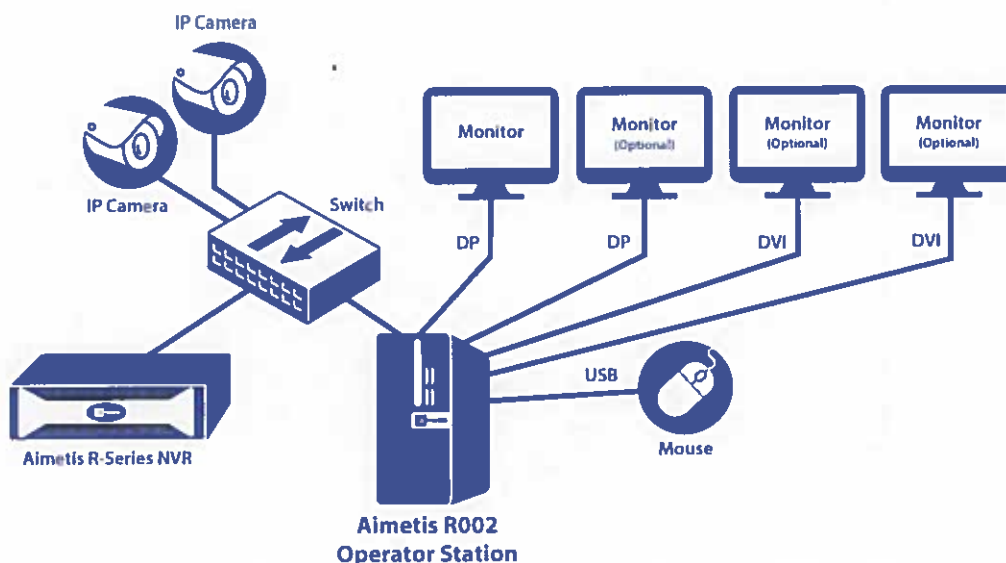
Specifications		
Model	R001	R002
Form Factor	Small Form Factor PC	
CPU	Intel® Core™ i5-6500 3.2GHz	Intel® Core™ i7-6700 3.4GHz
RAM	8GB DDR4 2400MHz	
Storage	500GB 7200 RPM SATA HDD	
OS	Windows 10 IoT Enterprise	
Aimetis Software	Symphony Client, Aimetis Kiosk™	
Graphics Engine	Intel® Integrated Graphics	Dual AMD Radeon™ R5 430
Video Output	2x DP, 1x HDMI	2x DP, 2x DVI
Supported Views	Up to 25 Camera Split View	
Max Resolution (HDMI 1.4)	4096x2304@24Hz (x1)	n/a
Max Resolution (DP)	4096x2304@60Hz (x2)	4096x2304@60Hz (x2)
Max Resolution (DVI)	n/a	4096x2304@60Hz (x2)
Video Compression	H.264, H.265, MPEG-4, Motion JPEG	
USB Ports	6x USB 3.0, 4x USB 2.0	
Ethernet	1x Gigabit Ethernet	
Network Protocols	TCP, UDP, IP, HTTP, RTSP, ICMP, ARP, DHCP, DNS	
Security	Password Protection, Aimetis Kiosk Software	
Power Supply	180W	
Operating Temperature	5°C to 35°C (41°F to 95°F)	
Dimensions	290 x 292 x 926 mm / 11.4 x 11.5 x 3.6 in	
Weight	5.26 kg (11.57 lbs)	
Input Voltage	100 V AC to 240 V AC, 50 Hz to 60 Hz, 3A/1.5A	
Compliance	CE, FCC, RoHS	
Warranty	Hardware: Three Years Next Business Day On Site	
Included Accessories	Keyboard, Mouse, Power cord, DisplayPort to HDMI adapter	
Ordering Information	AIM-R001	AIM-R002

Technical Services (Three Years, Included)

Access to certified hardware and software experts
 Operating System support
 Aimetis Symphony software support
 Aimetis Symphony software upgrades
 NBD on-site parts and labor response after remote diagnostics



1. Universal audio jack | 2. USB 2.0 ports (one with PowerShare) | 3. USB 3.1 ports | 4. Two DisplayPort and one HDMI digital video outputs (R001) or two DisplayPort and two DVI digital video outputs (R002) | 5. Serial port | 6. More USB 3.1 ports | 7. USB 2.0 with smart power on | 8. PSU | 9. Security slot



aimetis
a Senstar company

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aimetis.com

SmartView 4K



The world's first full resolution Ultra HD broadcast monitor with multi rate 12G-SDI, an extremely bright display with wide viewing angle, plus advanced broadcast features like 3D LUT support, H/V delay, blue only, adjustable frame guides and more! SmartView 4K is compatible with all SD, HD and Ultra HD formats up to 2160p60. With both AC and DC power connections, SmartView 4K can be used in broadcast studios or on set.

\$995

Connections

SDI Video Input

2 SDI inputs automatically switch between SD, HD, 3G, 6G and 12G-SDI. Reclocked video output.

Optical Video Input

SFP Optical Fiber connector cage.

SDI Video Output

Automatically switches to input selection.

Multi Rate Support

Auto detection of 4K, 2K, HD or standard definition inputs.

Updates and Configuration

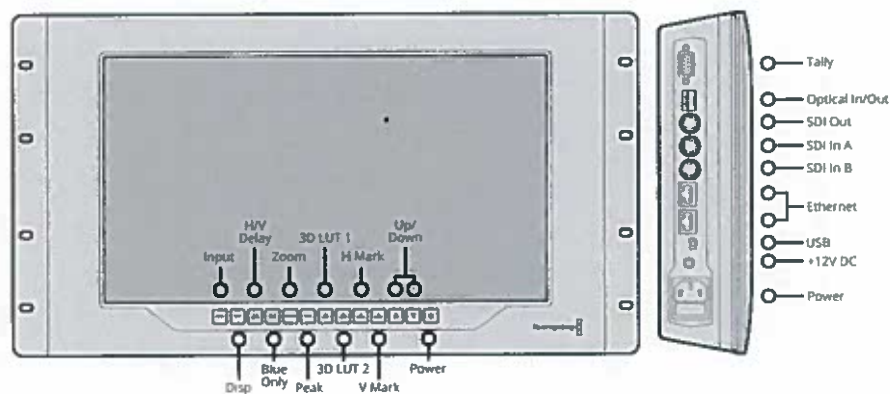
USB

Ethernet

Gigabit ethernet with loop through.

Tally

9-pin D connector



Standards

SDI Format Support

525/59.95 NTSC, 625/25 PAL

HD Format Support

720p50, 720p59.94, 720p60
1080p23.98, 1080p24, 1080p25,
1080p29.97, 1080p30, 1080p50,
1080p59.94, 1080p60
1080PsF23.98, 1080PsF24
1080i50, 1080i59.94, 1080i60

2K Format Support

2K DCI 23.98p, 2K DCI 24p, 2K DCI 25p
2K DCI 23.98PsF, 2K DCI 24PsF,
2K DCI 25PsF

Ultra HD Format Support

2160p23.98, 2160p24, 2160p25,
2160p29.97, 2160p30, 2160p50,
2160p59.94, 2160p60

4K Format Support

4K DCI 23.98p, 4K DCI 24p, 4K DCI 25p

SDI Compliance

SMPTE 259M, SMPTE 292M,
SMPTE 296M, SMPTE 372M,
SMPTE 424M Level A and B,
SMPTE 425M.

SDI Color Space

REC 601, REC 709

SDI Auto Switching

Automatically selects between SD, HD,
3G, 6G and 12G-SDI.

Video Sampling

4:2:2 and 4:4:4

Software

Internal Software Upgrade

Via included firmware updater software.

Settings Control

Via USB or Ethernet.

Operating Systems



macOS 10.12 Sierra,
macOS High Sierra
10.13 or later.



Windows 8.1 or
Windows 10.

Display

Display Element

15.6" TFT Active Matrix LCD

Response

25 ms

Color Depth

16.7 million colors

Display Resolution

3840 x 2160 pixels

Contrast Ratio

1000:1

Power Requirements

Power Supply

Built in IEC 90 - 240V AC power supply,
plus DC input jack for external power.

Power Consumption

24 Watts

Physical Specifications



Environmental Specifications

Operating Temperature

0° to 40° C (32° to 104° F)

Storage Temperature

-20° to 60° C (-4° to 140° F)

Relative Humidity

0% to 90% non-condensing

What's Included

SmartView 4K

SD card with software and manual

Warranty

12 Months Limited Manufacturer's Warranty.

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ADDENDUM 1



PORT & MARINE SERVICES

201 William Street
Key West, FL 33040

ADDENDUM NO. 1

**CCTV SURVEILLANCE SYSTEM BIGHT
MALLORY SQUARE & OUTER MOLE
ITB #18-015**

The information contained in this Addendum adds information to be included in the Bid and is hereby made a part of the Contract Documents. The referenced bid package is hereby addended in accordance with the following items:

QUESTIONS and CLARIFICATIONS

1. The bid opening date has changed to Tuesday February 20, 2018 at 3:00pm.
2. All requests for additional information or clarification must be received no later than Tuesday February 13, 2018 at 5:00pm.
3. The Coast Guard range marker tower, located on Navy property, may be used to mount equipment. See attached photo.
4. Mandatory Pre-Bid Sign-In sheet attached.

PROCUREMENT REQUIREMENTS

1. Non-Collusion Affidavit attached.

All other elements of the Contract and Bid documents, shall remain unchanged.

All Bidders shall acknowledge receipt and acceptance of this **Addendum No. 1** by submitting the addendum with their proposal. Proposals submitted without acknowledgement or without this Addendum may be considered non-responsive.

Signature

A handwritten signature in blue ink, consisting of a large, stylized 'K' followed by a loop.

Hy-Tech Solutions, Inc.

Name of Business



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Google earth

PORT & MARINE SERVICES
CCTV SURVEILLANCE SYSTEM
MALLORY SQUARE & OUTER MOLE
ITB #18-015

Mandatory Pre-Bid Meeting SIGN-IN Sheet

February 7, 2018

2:30 PM

NAME / COMPANY

CONTACT #

EMAIL

KAREN OLSON ^{exw} 305-809-3803 KOLSON@CITYOFKAYWEST-FL.GOV

DAVE BRADSHAW ^{exw} 305-809-3792 DBRADSHAW " " " "

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J. MARTINO 561 616 9567 JMARTINO@AISG-ONLINE.COM

SS COUNTY OF MONROE

By: _____

19th day of February, 2018.

NOTARY PUBLIC, State of Florida at Large

My Commission Expires:



ADDENDUM 2



PORT & MARINE SERVICES

201 William Street
Key West, FL 33040

ADDENDUM NO. 2

**CCTV SURVEILLANCE SYSTEM BIGHT
MALLORY SQUARE & OUTER MOLE
ITB #18-015**

The information contained in this Addendum adds information to be included in the Bid and is hereby made a part of the Contract Documents. The referenced bid package is hereby addended in accordance with the following items:

QUESTIONS and CLARIFICATIONS

1. The bid requires the system to have a battery back-up of 8 hr. Batteries are typically used for less than 30 minutes to maintain a system from power disruption during short outages, until a generator engages, or sufficient time to properly power off equipment. Is 8 hour absolutely necessary? If so can a generator be used in combination with a ups to meet this requirement? Note: batteries are typically replaced every 3-5 years based on use the long term expense would be greater vs a generator.

Vendor to provide 1-hour minimum battery back-up.

2. Page 29 under d. general: "System shall be capable of withstanding extreme heat." What temp defines extreme? Both antenna and camera specified are only rated to 131F.

It is the vendors responsibility to assure all equipment withstands the conditions found in the City's subtropical climate.

3. Page 28 under d. general: "Vendor shall also provide, install, configure, and test a recording server adequately sized to provide thirty (30) days of recording." The summary does not give adequate information to determine hard drive sizing to meet this requirement. Please provide in addition the required frames per second and resolution.

Revised Bid Form, Summary of Work and new location map attached.

4. Page 29 under d. general: "System shall have viewing in color." Does this requirement apply to recording at night? Most cameras will switch to B/W in low light environments. Is color during the day acceptable with B/W at night?

Yes

5. Based on the information provided in the summary of work it is unclear to the amount of cameras and/or the area of coverage requested at each location. Can a map with color coordination be provided to identify the coverage areas that are required?

Revised Bid Form, Summary of Work and new location maps attached.

6. Item 20 of the bid form "Wi-Fi Service (30/30MBPS bandwidth) and 24hr System Monitoring". There is no detail given to this item in the summary. Can you provide additional information to the expectation for this item? (example: Wifi within XXXft of the equipment location? Internet service provided? System monitoring for failures? System monitoring of camera feeds for identified actions?)

There is no internet service at either location. Vendor shall supply service to meet the viewing/ monitoring capabilities as required by the ITB.

7. The pricing guide items 1 & 11 address permits at a fixed amount. Is this amount agreed upon with the permits office or do standard permit fees apply?

Permit fees listed on the Bid Form are an allowance. Actual standard permit fees will be reimbursed to the vendor at cost.

8. Please confirm there would be adequate required space for 100volt UPS at each location required.

See answer to question #1 above. UPS shall be stored in the weatherproof/vandal proof enclosure provided at Mallory Square. There is adequate room for the UPS in the Security Trailer at the Outer Mole.

9. Please confirm days and hours allowed to work on this project.

Construction noise allowed 8:00 a.m. to 7:00 p.m., Monday through Friday, and 9:00 a.m. to 5:00 p.m. on Saturday.

All other elements of the Contract and Bid documents, including the bid date shall remain unchanged.

All Bidders shall acknowledge receipt and acceptance of this **Addendum No. 2** by submitting the addendum with their proposal. Proposals submitted without acknowledgement or without this Addendum may be considered non-responsive.

Signature

Hy-Tech Solutions, Inc.

Name of Business

BID FORM

Project Title: **CCTV SURVEILLANCE SYSTEM
MALLORY SQUARE & OUTER MOLE**
Project No.: **ITB #18-015**

UNIT PRICE BID

Bid unit prices stated in this proposal include all costs and expenses for labor, equipment, materials, disposal and contractor's overhead and profit. Unit prices for the various work items are intended to establish a total price for completing the project in its entirety. All work and incidental costs shall be included for payment under the several scheduled items of the overall contract, and no separate payment will be made therefore.

MALLORY SQUARE

1. Permit Fees (to be paid at cost)

1 LS \$ 1,000.00

2. 180 Degree 4K Camera (includes all material, equipment and labor)

2 EA Unit Price \$ 10,320.00 TOTAL \$ 20,640.00

3. PZT 1080p Camera (includes all material, equipment and labor)

1 EA Unit Price \$ 13,760.00 TOTAL \$ 13,760.00

4. Antenna / Radio (includes all material, equipment and labor)

QTY. 2 Unit Price \$ 4,300.00 TOTAL \$ 8,600.00

5. Base Station Antenna / Radio (includes all material, equipment and labor)

QTY. 1 Unit Price \$ 4,500.00 TOTAL \$ 4,500.00

6. POE Switch (includes all material, equipment and labor)

QTY. 1 Unit Price \$ 1,290.00 TOTAL \$ 1,290.00

7. Network Video Recorder (includes all material, equipment and labor)

1 LS \$ 19,350.00

8. 4K Monitor (includes all material, equipment and labor)

1 LS \$ 1,300.00

9. Battery Back-up (includes all material, equipment and labor)

1 LS \$ 6,450.00

10. Surge Protection (includes all material, equipment and labor)

1 LS \$ 1,935.00

11. Weather/Vandal Proof Enclosure (includes all material, equipment and labor)

1 LS \$ 9,250.00

SUB-TOTAL OF ALL EXTENDED LINE ITEMS LISTED ABOVE:

Total of **Mallory Square** line items 1 - 11 \$ 88,075.00

OUTER MOLE

12. Permit Fees (to be paid at cost)

1 LS \$ 1,000.00

13. 180 Degree 4K Camera (includes all material, equipment and labor)

2 EA Unit Price \$ 10,320.00 TOTAL \$ 20,640.00

14. PZT 1080p Camera (includes all material, equipment and labor)

1 EA Unit Price \$ 13,760.00 TOTAL \$ 13,760.00

15. Antenna / Radio (includes all material, equipment and labor)

QTY. 2 Unit Price \$ 4,300.00 TOTAL \$ 8,600.00

16. Base Station Antenna / Radio (includes all material, equipment and labor)

QTY. 1 Unit Price \$ 4,500.00 TOTAL \$ 4,500.00

17. POE Switch (includes all material, equipment and labor)

QTY. 1 Unit Price \$ 1,290.00 TOTAL \$ 1,290.00

18. Network Video Recorder (includes all material, equipment and labor)

1 LS \$ 19,350.00

19. 4K Monitor (includes all material, equipment and labor)

1 LS \$ 2,150.00

120. Battery Back-up (includes all material, equipment and labor)

1 LS \$ 6,450.00

21. Surge Protection (includes all material, equipment and labor)

1 LS \$ 1,935.00

SUB-TOTAL OF ALL EXTENDED LINE ITEMS LISTED ABOVE:

Total of **Outer Mole** line items 12 - 21 \$ 79,675.00

22. Wi-Fi Service (30/30MBPS bandwidth) and 24hr System Monitoring

24 MO Unit Price/Mo. \$ 1,000.00 TOTAL \$ 24,000.00

23. General Allowance (only to be used with Owner's written approval)

1 LS \$ 5,000.00

TOTAL OF ALL EXTENDED LINE ITEMS LISTED ABOVE:

Total of line items 1 - 23 \$ 196,750.00

One Hundred Ninety-Six Thousand Seven Hundred Fifty Dollars & Zero Cents
(amount written in words)

Cost of work to be all inclusive for a complete job including equipment, material, labor, permits, insurance, overhead and profit.

Alternate Bid #1

1. Security staff monitoring stations for both Mallory Square and Outer Mole to be shared and located at the Outer Mole checkpoint ((1) Monitor, (1) NVR).

Total of lump sum BID ALTERNATE #1 ADD / DEDUCT (circle one) \$ 6,150.00

Six Thousand One Hundred Fifty Dollars & Zero Cents
(amount written in words)

Additional Pricing

1. Monthly system maintenance cost after warranty expiration. Costs to include all material, equipment and labor.

1 MO Unit Price/Mo. \$ 3,700.00

SUMMARY OF WORK

WORK INCLUDED

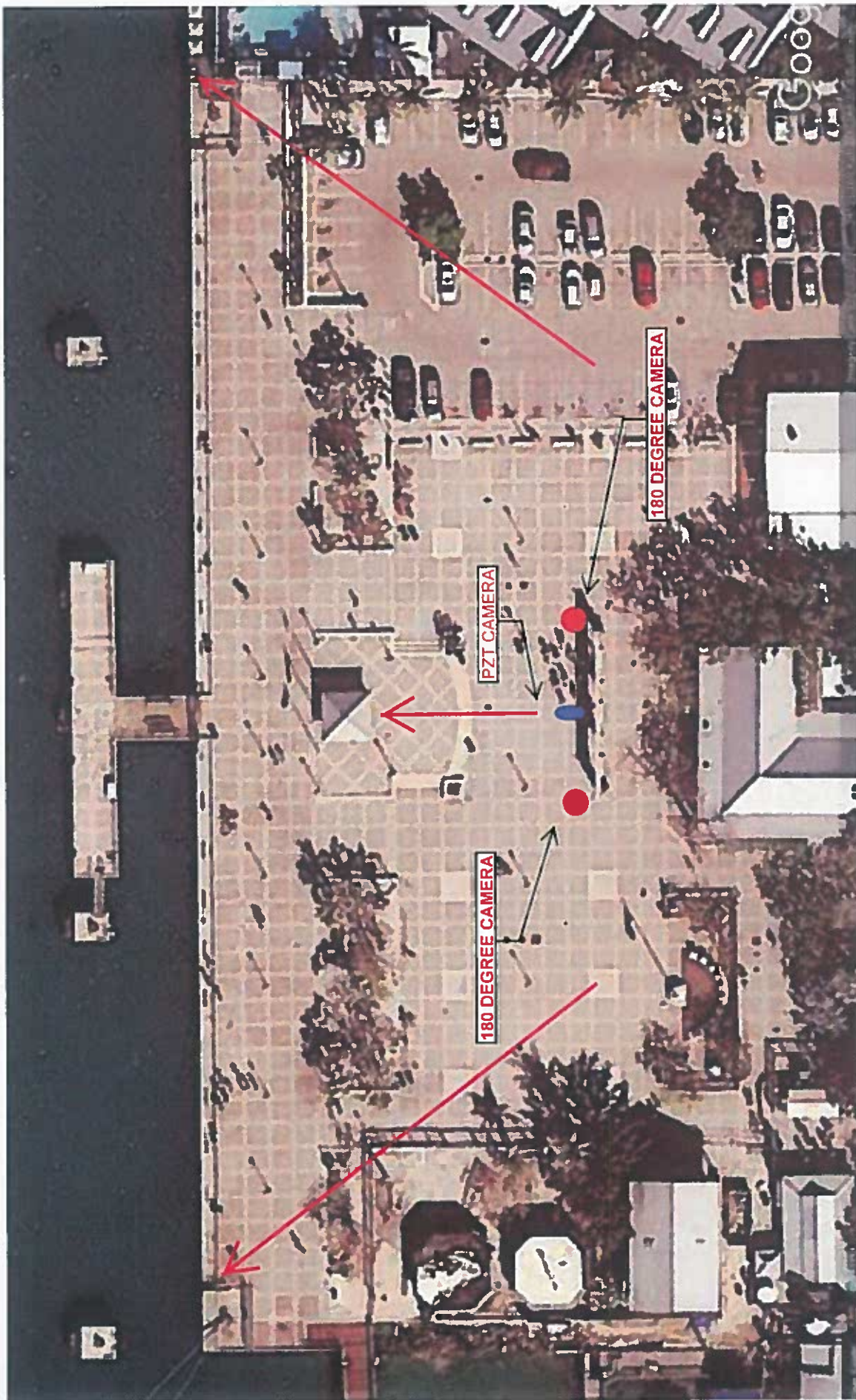
1. The Contractor will design and furnish all CCTV Surveillance System material, equipment, machinery, and labor to accomplish the following minimum requirements for each site:
 - a. **Mallory Square Security Checkpoint:**
 - Axis Q3709-PVE 180 degree 4K camera and required mounts or Equal
 - Axis Q6115-E PZT 1080p camera and required mounts or Equal
 - Ignitenet: MetroLinq 2.5G 60-19 PTP/Client antenna/radio and required mounts or Equal
 - Ignitenet: MetroLinq 2.5G 60-30-18 Sector base station antenna/radio and required mounts or Equal
 - Netonix WS-12-250-AC POE switch or equal
 - NVR with 8 channels, 30 days storage @ 30fps with ability to expand storage
 - 19" Full-HD 4K Monitor
 - Wall mount weatherproof/vandal proof enclosure for NVR and monitor
 - b. **Outer Mole Security Checkpoint:**
 - Axis Q3709-PVE 180 degree 4K camera and required mounts or Equal
 - Axis Q6115-E PZT 1080p camera and required mounts or Equal
 - Ignitenet: MetroLinq 2.5G 60-19 PTP/Client antenna/radio and required mounts or Equal
 - Ignitenet: MetroLinq 2.5G 60-30-18 Sector base station antenna/radio and required mounts or Equal
 - Netonix WS-12-250-AC POE switch or equal
 - NVR with 8 channels, 30 days storage @ 30fps with ability to expand storage
 - 32" Full-HD 4K Monitor
 - c. **Alternate Bid:**
 - Security staff monitoring stations for both Mallory Square and Outer Mole to be located at the Outer Mole checkpoint. This alternate eliminates the NVR and monitor from the Mallory square location and reduces the size of the enclosure.
 - d. **General:**
 - System must have remote viewing capabilities and must be fully functional for employee's computers and iPhones and other hand-held devices
 - If a camera or lighting test is necessary to determine the operating parameters of the proposed camera(s), test shall be performed at the expense of the vendor.
 - Vendor responsible to provide necessary electrical wiring from City's existing infrastructure to all new equipment. This wiring shall be encased in conduit.
 - Vendor shall also provide, install, configure, and test a recording server adequately sized to provide thirty (30) days of recording.
 - System shall include all necessary software and licenses.
 - There shall not be re-occurring licensing fees.

- System shall have constant coverage of areas.
 - Entire system to have battery Back-up: 1-hr minimum battery life.
 - Entire system to have surge protection: 600 joules minimum.
 - System shall have viewing in color.
 - System shall be capable of withstanding harsh environment including corrosive conditions caused by saltwater and hurricane winds and/or be in protective housing.
 - System shall be capable of withstanding extreme heat
 - Cables/ wiring shall be protected from vandalism by the use of conduit or other means.
 - Cameras shall be vandal resistant.
 - Vendor to remove, and dispose of, any existing abandoned CCTV equipment.
2. Vendor will be responsible for identifying and verifying availability of locations for mounting cameras or equipment. If mounting locations are not available, Contractor will be responsible for installing mounting locations. Installation shall be included with Proposal.
 3. Vendor to provide a complete written description including system capabilities, type of cameras including brand, capability of cameras, recording ability in quality and quantity and upgrade/ expansion capabilities.
 4. Vendor to provide a complete written description including type of system and brand of stand-alone monitoring / retrieval system. Description shall include playback capability, copying to DVD, print screen ability, etc...
 5. Vendor to provide a complete system layout showing camera locations, wiring, antennas, etc.
 6. Contractor to provide cut sheets on all equipment including cameras, computers, recording devices, wiring, etc.
 7. The City is requiring the Bidder to warranty all materials and labor for two (2) years. Warranty will begin once the City determines the system is operating as specified in the technical specifications for a period of 30-days. Provide complete written description of warranty and what it covers.

During warranty period vendor shall identify and diagnose system/ equipment failures within 24 hours. All system repairs must be made within 72 hours.

If repairs are not completed within the required 72 hours a fine of \$100/day will be imposed until repairs are made

8. Vendor to describe how the cameras, antennas, etc. will be protected in the harsh coastal environment including type of housing units.
9. Vendor to describe how the cameras, antennas, monitoring / recording equipment etc. will be protected against power surge.
10. Vendor to describe the type of training, if any, provided with the proposed system.
11. Vendor shall secure permits as necessary for proper execution and completion of the work and shall ensure that all Federal, State, and Local codes are followed.
12. Vendor shall take the necessary steps to secure the site including fencing, barricades, and/or security to prevent entry by unauthorized persons. The Port & Marine Services Director or designee shall approve security measures.
13. It shall be the Vendor's responsibility to request approval for entrance to certain areas of worksite for work on Saturdays, Sundays, holiday, and weekday hours other than 7:00 am until 5:00 pm.



MALLORY SQUARE
(CAMERA LOCATION MAP)



OUTER MOLE
(CAMERA LOCATION MAP)