



Purchasing Division  
 2019 Washington Street East  
 Post Office Box 50130  
 Charleston, WV 25305-0130

State of West Virginia  
 Request for Quotation  
 04 - Audio/Video

Proc Folder: 184004

Doc Description: ADDENDUM #3 ONE TIME PURCHASE & COMPLETE INSTALL OF A CCTV

Proc Type: Central Purchase Order

Date Issued	Solicitation Closes	Solicitation No	Version
2016-08-30	2016-09-07 13:30:00	CRFQ 0506 WSH1700000001	4

BID CLERK

DEPARTMENT OF ADMINISTRATION  
 PURCHASING DIVISION  
 2019 WASHINGTON ST E  
 CHARLESTON  
 US

WV 25305

Vendor Name, Address and Telephone Number:

Longs Security Camera Systems LLC  
 102 38th St SE  
 Charleston WV 25304

No change in previous submitted Bid. Add cover letter and addendum acknowledgement to bid

RECEIVED

2016 SEP -7 PM 12:48

WV PURCHASING DIVISION

FOR INFORMATION CONTACT THE BUYER

April Battle  
 (304) 558-0067  
 april.e.battle@wv.gov

Signature

FEIN # 20-3981800

DATE 9/7/2016

All offers subject to all terms and conditions contained in this solicitation

**ADDENDUM ACKNOWLEDGEMENT FORM**  
**SOLICITATION NO.: WSH1700000001**

**Instructions:** Please acknowledge receipt of all addenda issued with this solicitation by completing this addendum acknowledgment form. Check the box next to each addendum received and sign below. Failure to acknowledge addenda may result in bid disqualification.


**Acknowledgment:** I hereby acknowledge receipt of the following addenda and have made the necessary revisions to my proposal, plans and/or specification, etc.

**Addendum Numbers Received:**

(Check the box next to each addendum received)

- |  |  |
|--|--|
| <input checked="" type="checkbox"/> Addendum No. 1 | <input type="checkbox"/> Addendum No. 6  |
| <input checked="" type="checkbox"/> Addendum No. 2 | <input type="checkbox"/> Addendum No. 7  |
| <input checked="" type="checkbox"/> Addendum No. 3 | <input type="checkbox"/> Addendum No. 8  |
| <input type="checkbox"/> Addendum No. 4            | <input type="checkbox"/> Addendum No. 9  |
| <input type="checkbox"/> Addendum No. 5            | <input type="checkbox"/> Addendum No. 10 |

I understand that failure to confirm the receipt of addenda may be cause for rejection of this bid. I further understand that any verbal representation made or assumed to be made during any oral discussion held between Vendor's representatives and any state personnel is not binding. Only the information issued in writing and added to the specifications by an official addendum is binding.

Longs Security Camera Systems LLC  
Company  
  
Authorized Signature  
09/07/2016  
Date

**NOTE:** This addendum acknowledgment should be submitted with the bid to expedite document processing.  
Revised 6/8/2012



Purchasing Division  
 2019 Washington Street East  
 Post Office Box 50130  
 Charleston, WV 25305-0130

State of West Virginia  
 Request for Quotation  
 04 - Audio/Video

Proc Folder: 184004

Doc Description: ONE TIME PURCHASE AND COMPLETE INSTALLATION OF A CCTV SYSTEM

Proc Type: Central Purchase Order

Date Issued	Solicitation Closes	Solicitation No	Version
2016-07-15	2016-08-16 13:30:00	CRFQ 0506 WSH1700000001	1

**LOCATION**

BID CLERK  
 DEPARTMENT OF ADMINISTRATION  
 PURCHASING DIVISION  
 2019 WASHINGTON ST E  
 CHARLESTON WV 25305  
 US

**Vendor Name, Address and Telephone Number:**

Long's Security Camera Systems LLC  
 102 38th ST SE  
 Charleston WV 25304

See attached addendum #2 and #3

**FOR INFORMATION CONTACT THE BUYER**

April Battle  
 (304) 558-0067  
 april.e.battle@wv.gov

Signature X

FEIN # 20-3881880

DATE 08/12/2016

All offers subject to all terms and conditions contained in this solicitation

**ADDITIONAL TERMS AND CONDITIONS (Construction Contracts Only)**

**1. CONTRACTOR'S LICENSE:** West Virginia Code § 21-11-2 requires that all persons desiring to perform contracting work in this state be licensed. The West Virginia Contractors Licensing Board is empowered to issue the contractor's license. Applications for a contractor's license may be made by contacting the West Virginia Division of Labor. West Virginia Code § 21-11-11 requires any prospective Vendor to include the contractor's license number on its bid. Failure to include a contractor's license number on the bid shall result in Vendor's bid being disqualified. Vendors should include a contractor's license number in the space provided below.

Contractor's Name: Longs' Security Camera Systems LLC  
Contractor's License No. WV040102

The apparent successful Vendor must furnish a copy of its contractor's license prior to the issuance of a Award Document.

**2. DRUG-FREE WORKPLACE AFFIDAVIT:** W. Va. Code § 21-1D-5 provides that any solicitation for a public improvement contract requires each Vendor that submits a bid for the work to submit at the same time an affidavit that the Vendor has a written plan for a drug-free workplace policy. To comply with this law, Vendor must either complete the enclosed drug-free workplace affidavit and submit the same with its bid or complete a similar affidavit that fulfills all of the requirements of the applicable code. Failure to submit the signed and notarized drug-free workplace affidavit or a similar affidavit that fully complies with the requirements of the applicable code, with the bid shall result in disqualification of Vendor's bid. Pursuant to W. Va. Code 21-1D-2(b) and (k), this provision does not apply to public improvement contracts the value of which is \$100,000 or less or temporary or emergency repairs.

**2.1.DRUG-FREE WORKPLACE POLICY:** Pursuant to W. Va. Code § 21-1D-4, Vendor and its subcontractors must implement and maintain a written drug-free workplace policy that complies with said article. The awarding public authority shall cancel this contract if: (1) Vendor fails to implement and maintain a written drug-free workplace policy described in the preceding paragraph, (2) Vendor fails to provide information regarding implementation of its drug-free workplace policy at the request of the public authority; or (3) Vendor provides to the public authority false information regarding the contractor's drug-free workplace policy.

Pursuant to W. Va. Code 21-1D-2(b) and (k), this provision does not apply to public improvement contracts the value of which is \$100,000 or less or temporary or emergency repairs.

**3. DRUG FREE WORKPLACE REPORT:** Pursuant to W. Va. Code § 21-1D-7b, no less than once per year, or upon completion of the project, every contractor shall provide a certified report to the public authority which let the contract. For contracts over \$25,000, the public authority shall be the West Virginia Purchasing Division. For contracts of \$25,000 or less, the public authority shall be the agency issuing the contract. The report shall include:

(1) Information to show that the education and training service to the requirements of West Virginia Code § 21-1D-5 was provided;

**DESIGNATED CONTACT:** Vendor appoints the individual identified in this Section as the Contract Administrator and the initial point of contact for matters relating to this Contract.

Alan E Long, Owner

(Name, Title)

ALAN E LONG, OWNER

(Printed Name and Title)

102 30th ST SE, Charleston WV 25304

(Address)

304-925-0338 / 304-925-0338

(Phone Number) / (Fax Number)

longscctv@suddenlink.net

(email address)

**CERTIFICATION AND SIGNATURE:** By signing below, or submitting documentation through wvOASIS, I certify that I have reviewed this Solicitation in its entirety; that I understand the requirements, terms and conditions, and other information contained herein; that this bid, offer or proposal constitutes an offer to the State that cannot be unilaterally withdrawn; that the product or service proposed meets the mandatory requirements contained in the Solicitation for that product or service, unless otherwise stated herein; that the Vendor accepts the terms and conditions contained in the Solicitation, unless otherwise stated herein; that I am submitting this bid, offer or proposal for review and consideration; that I am authorized by the vendor to execute and submit this bid, offer, or proposal, or any documents related thereto on vendor's behalf; that I am authorized to bind the vendor in a contractual relationship; and that to the best of my knowledge, the vendor has properly registered with any State agency that may require registration.

Long's Security Camera Systems LLC

(Company)

Alan E Long, Owner

(Authorized Signature) (Representative Name, Title)

ALAN E LONG, OWNER

(Printed Name and Title of Authorized Representative)

08/12/2016

(Date)

304-925-0338 / 304-925-0338

(Phone Number) (Fax Number)

REQUEST FOR QUOTATION  
Closed Circuit Television System Expansion

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10.1.4. Failure to remedy deficient performance upon request.

10.2. The following remedies shall be available to Agency upon default.

10.2.1. Cancellation of the Contract.

10.2.2. Cancellation of one or more release orders issued under this Contract.

10.2.3. Any other remedies available in law or equity.

**11. MISCELLANEOUS:**

11.1. **Contract Manager:** During its performance of this Contract, Vendor must designate and maintain a primary contract manager responsible for overseeing Vendor's responsibilities under this Contract. The Contract manager must be available during normal business hours to address any customer service or other issues related to this Contract. Vendor should list its Contract manager and his or her contact information below.

Contract Manager: ALAN E LONG  
Telephone Number: 304-925-0338  
Fax Number: 304-925-0338  
Email Address: longscctv@suddenlink.net

STATE OF WEST VIRGINIA  
Purchasing Division

# PURCHASING AFFIDAVIT

**MANDATE:** Under W. Va. Code §5A-3-10a, no contract or renewal of any contract may be awarded by the state or any of its political subdivisions to any vendor or prospective vendor when the vendor or prospective vendor or a related party to the vendor or prospective vendor is a debtor and: (1) the debt owed is an amount greater than one thousand dollars in the aggregate; or (2) the debtor is in employer default.

**EXCEPTION:** The prohibition listed above does not apply where a vendor has contested any tax administered pursuant to chapter eleven of the W. Va. Code, workers' compensation premium, permit fee or environmental fee or assessment and the matter has not become final or where the vendor has entered into a payment plan or agreement and the vendor is not in default of any of the provisions of such plan or agreement.

**DEFINITIONS:**

**"Debt"** means any assessment, premium, penalty, fine, tax or other amount of money owed to the state or any of its political subdivisions because of a judgment, fine, permit violation, license assessment, defaulted workers' compensation premium, penalty or other assessment presently delinquent or due and required to be paid to the state or any of its political subdivisions, including any interest or additional penalties accrued thereon.

**"Employer default"** means having an outstanding balance or liability to the old fund or to the uninsured employers' fund or being in policy default, as defined in W. Va. Code § 23-2c-2, failure to maintain mandatory workers' compensation coverage, or failure to fully meet its obligations as a workers' compensation self-insured employer. An employer is not in employer default if it has entered into a repayment agreement with the Insurance Commissioner and remains in compliance with the obligations under the repayment agreement.

**"Related party"** means a party, whether an individual, corporation, partnership, association, limited liability company or any other form or business association or other entity whatsoever, related to any vendor by blood, marriage, ownership or contract through which the party has a relationship of ownership or other interest with the vendor so that the party will actually or by effect receive or control a portion of the benefit, profit or other consideration from performance of a vendor contract with the party receiving an amount that meets or exceeds five percent of the total contract amount.

**AFFIRMATION:** By signing this form, the vendor's authorized signer affirms and acknowledges under penalty of law for false swearing (W. Va. Code §61-5-3) that neither vendor nor any related party owe a debt as defined above and that neither vendor nor any related party are in employer default as defined above, unless the debt or employer default is permitted under the exception above.

**WITNESS THE FOLLOWING SIGNATURE:**

Vendor's Name:

Long's Security Camera Systems LLC

Authorized Signature:

[Handwritten Signature]

Date:

08/12/2016

State of

WV

County of

KANAWHA

to-wit:

Taken, subscribed, and sworn to before me this

12 day of Aug

2016.

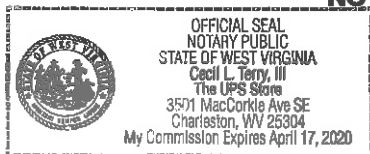
My Commission expires

4/17

2020

**AFFIX SEAL HERE**

**NOTARY PUBLIC**



[Handwritten Signature]  
Purchasing Affidavit (Revised 08/01/2015)



STATE OF WEST VIRGINIA

## Offices of the Insurance Commissioner

**EARL RAY TOMBLIN**  
Governor

**MICHAEL D. RILEY**  
Insurance Commissioner

February 25, 2016

Longs' Security Camera Systems LLC  
102 38<sup>th</sup> Street SE  
Charleston, WV 25304

RE: Exempt ID: WCEX19820

Dear Employer:

Your request for an extension/renewal of the opinion as to your exempt status the requirement to maintain West Virginia Workers' Compensation Insurance has been received and processed. According to the information provided in your application, you have no employees who are required under West Virginia law to be provided West Virginia workers' compensation coverage. Therefore, the OIC is of the opinion, based on the information provided, that you are exempt from having to maintain West Virginia workers' compensation coverage.

This exemption opinion extension/renewal is valid until **March 9, 2017**, or until circumstances change which require you to maintain workers' compensation coverage, such as acquiring employees or a business re-organization. Hiring even one (1) employee not falling within the scope of this exemption would require you to obtain coverage. If such changes occur, you must either submit another request for exemption or obtain workers' compensation coverage. Failure to obtain the mandatory coverage can result in severe penalties such as an administrative fine up to \$10,000, financial responsibility for benefits paid from the uninsured fund for any accidents and losses during periods when you are not insured, and placement on the Employer Violator System, which can result in revocation of your business license and any other licenses, permits or certificates required to do business in West Virginia. Further, be reminded that in accordance with W.Va. Code §61-3-24e(5), it is a felony to knowingly and willingly make false statements respecting any information required to be provided under the WV Workers' Compensation Act. Upon conviction, the individual shall be confined in a penitentiary for up to three years, fined up to \$10,000, or both.

*Please be advised that this exemption extension/renewal is advisory in nature and does not constitute any formal adjudication or legal conclusion as to the workers' compensation status of your company. It is based solely on the information you provided to us in your application. If the information provided in the application is incorrect, unclear or ambiguous, then this exemption may also be erroneous. It is important for anyone relying on this exemption to be aware of this. Additionally, this letter does not serve in lieu of a certificate of coverage in order to allow a prime contractor to avoid liability for employees of subcontractors under W.Va. Code §23-2-1d.*

Should you find that you are in need of workers compensation coverage, you may apply for coverage from one of the approved carriers of workers compensation. A list of these carriers can be found on our website at [www.wvinsurance.gov](http://www.wvinsurance.gov) underneath the box entitled Workers Compensation found in the center of the page. If you are unable to access the website for a list of these carriers, please feel free to contact our offices at (304) 558-6279, ext 1229.

Sincerely,

Employer Coverage  
Office of the West Virginia Insurance Commissioner

ec/jc





# CONTRACTOR LICENSE

Authorized by the  
**West Virginia Contractor Licensing Board**

**Number:** WV040102

**Classification:**  
LOW VOLTAGE SYSTEMS

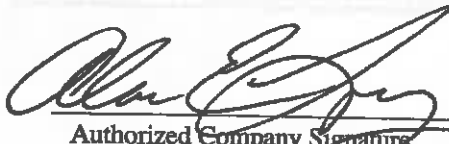
LONGS SECURITY CAMERA SYSTEMS LLC  
DBA LONGS SECURITY CAMERA SYSTEMS LLC  
102 38TH STREET SE  
CHARLESTON, WV 25304


**Date Issued**

DECEMBER 30, 2016

**Expiration Date**

DECEMBER 30, 2017

  
Authorized Company Signature

  
Chair, West Virginia Contractor  
Licensing Board

**WEST VIRGINIA  
CONTRACTOR  
LICENSING  
BOARD**

This license, or a copy thereof, must be posted in a conspicuous place at every construction site where work is being performed. This license number must appear in all advertisements, on all bid submissions and on all fully executed and binding contracts. This license cannot be assigned or transferred by licensee. Issued under provisions of West Virginia Code, Chapter 21, Article 11.

**CERTIFICATE OF LIABILITY INSURANCE**

DATE (MM/DD/YYYY)  
8/12/2016

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).

<b>PRODUCER</b> USI Ins Svcs Sm C/L Bluefield 745 S. College Ave Bluefield, VA 24605 276 979-1799		<b>CONTACT NAME:</b> Teresa Alley <b>PHONE (A/C, No, Ext):</b> 276-979-1751 <b>E-MAIL ADDRESS:</b> teresa.alley@usi.biz <b>FAX (A/C, No):</b> 866-609-0867	
<b>INSURED</b> Long's Security System LLC 102 38th St. SE Charleston, WV 25304		<b>INSURER(S) AFFORDING COVERAGE</b> INSURER A : Maxum Indemnity Company INSURER B : INSURER C : INSURER D : INSURER E : INSURER F :	
		NAIC # 26743	

**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 SUBR INSR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	<input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR <input checked="" type="checkbox"/> B/PPD Ded: \$500 GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC OTHER:		BDG005077603	12/20/2015	12/20/2016	EACH OCCURRENCE	\$1,000,000
						DAMAGE TO RENTED PREMISES (Ea occurrence)	\$100,000
						MED EXP (Any one person)	\$1,000
						PERSONAL & ADV INJURY	\$1,000,000
						GENERAL AGGREGATE	\$2,000,000
						PRODUCTS - COMP/OP AGG	\$2,000,000
							\$
	AUTOMOBILE LIABILITY <input type="checkbox"/> ANY AUTO <input type="checkbox"/> ALL OWNED AUTOS <input type="checkbox"/> HIRED AUTOS <input type="checkbox"/> SCHEDULED AUTOS <input type="checkbox"/> NON-OWNED AUTOS					COMBINED SINGLE LIMIT (Ea accident)	\$
						BODILY INJURY (Per person)	\$
						BODILY INJURY (Per accident)	\$
						PROPERTY DAMAGE (Per accident)	\$
							\$
	UMBRELLA LIAB <input type="checkbox"/> OCCUR EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE DED                    RETENTION \$					EACH OCCURRENCE	\$
						AGGREGATE	\$
							\$
	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? <input type="checkbox"/> Y/N (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	N/A				PER STATUTE	OTHER
						E.L. EACH ACCIDENT	\$
						E.L. DISEASE - EA EMPLOYEE	\$
						E.L. DISEASE - POLICY LIMIT	\$

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

**CERTIFICATE HOLDER**

**CANCELLATION**

Health and Human Resources William R Sharpe Jr Hospital 936 Sharpe Hospital Road Weston, WV 26452	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 
--	---

WV-73  
Approved / Revised 08/01/15



State of West Virginia  
DRUG FREE WORKPLACE CONFORMANCE AFFIDAVIT  
West Virginia Code §21-1D-5

STATE OF WEST VIRGINIA,  
COUNTY OF Kanawha, TO-WIT:

I, Alan E Long, after being first duly sworn, depose and state as follows:

- I am an employee of Long's Security Camera Systems LLC; and,  
(Company Name)
- I do hereby attest that Long's Security Camera Systems LLC  
(Company Name)

maintains a written plan for a drug-free workplace policy and that such plan and policy are in compliance with West Virginia Code §21-1D.

The above statements are sworn to under the penalty of perjury.

Printed Name: Alan E Long  
 Signature: [Handwritten Signature]  
 Title: Owner  
 Company Name: Long's Security Camera Systems LLC  
 Date: 08/12/2016

Taken, subscribed and sworn to before me this 12 day of Aug, 2016.

By Commission expires 4/17/2020

(Seal)



OFFICIAL SEAL  
 NOTARY PUBLIC  
 STATE OF WEST VIRGINIA  
 Cecil L. Terry, III  
 The UPS Store  
 3501 MacCorkle Ave SE  
 Charleston, WV 25304  
 My Commission Expires April 17, 2020

(Notary Public)

**THIS AFFIDAVIT MUST BE SUBMITTED WITH THE BID IN ORDER TO COMPLY WITH WV CODE PROVISIONS. FAILURE TO INCLUDE THE AFFIDAVIT WITH THE BID SHALL RESULT IN DISQUALIFICATION OF THE BID.**

**BID BOND**

KNOW ALL MEN BY THESE PRESENTS, That we, the undersigned, Long's Security Camera System LLC  
of Charleston, WV, as Principal, and Western Surety Company  
of Chicago, IL, a corporation organized and existing under the laws of the State of  
SD with its principal office in the City of Chicago, as Surety, are held and firmly bound unto the State  
of West Virginia, as Obligees, in the penal sum of Five Percent of Amount Bid (\$ 5%) for the payment of which,  
well and truly to be made, we jointly and severally bind ourselves, our heirs, administrators, executors, successors and assigns.

The Condition of the above obligation is such that whereas the Principal has submitted to the Purchasing Section of the  
Department of Administration a certain bid or proposal, attached hereto and made a part hereof, to enter into a contract in writing for  
Installation of 43 Camera's, 2 MVR's and 5 Network Switches, Weston, WV

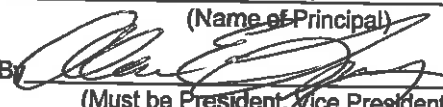
**NOW THEREFORE,**

- (a) If said bid shall be rejected, or
- (b) If said bid shall be accepted and the Principal shall enter into a contract in accordance with the bid or proposal attached hereto and shall furnish any other bonds and insurance required by the bid or proposal, and shall in all other respects perform the agreement created by the acceptance of said bid, then this obligation shall be null and void, otherwise this obligation shall remain in full force and effect. It is expressly understood and agreed that the liability of the Surety for any and all claims hereunder shall, in no event, exceed the penal amount of this obligation as herein stated.

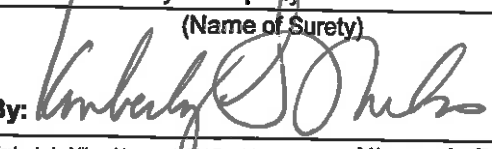
The Surety, for the value received, hereby stipulates and agrees that the obligations of said Surety and its bond shall be in no way impaired or affected by any extension of the time within which the Obligees may accept such bid, and said Surety does hereby waive notice of any such extension.

WITNESS, the following signatures and seals of Principal and Surety, executed and sealed by a proper officer of Principal and Surety, or by Principal individually if Principal is an individual, this 16th day of August, 2016.

Principal Seal

Long's Security Camera System LLC  
(Name of Principal)  
By:   
(Must be President, Vice President, or  
Duly Authorized Agent)  
Owner  
(Title)

Surety Seal

Western Surety Company  
(Name of Surety)  
By:   
Kimberly L. Miles, Licensed WV Resident Agent Attorney-in-Fact

**IMPORTANT – Surety executing bonds must be licensed in West Virginia to transact surety insurance, must affix its seal, and must attach a power of attorney with its seal affixed.**

# Western Surety Company

## POWER OF ATTORNEY APPOINTING INDIVIDUAL ATTORNEY-IN-FACT

Know All Men By These Presents, That WESTERN SURETY COMPANY, a South Dakota corporation, is a duly organized and existing corporation having its principal office in the City of Sioux Falls, and State of South Dakota, and that it does by virtue of the signature and seal herein affixed hereby make, constitute and appoint

**Andrew K Teeter, Kimberly L Miles, Douglas P Taylor, Kimberly S Burdette, Jaime L Carpenter, Individually**

of Charleston, WV, its true and lawful Attorney(s)-in-Fact with full power and authority hereby conferred to sign, seal and execute for and on its behalf bonds, undertakings and other obligatory instruments of similar nature

**- In Unlimited Amounts -**

and to bind it thereby as fully and to the same extent as if such instruments were signed by a duly authorized officer of the corporation and all the acts of said Attorney, pursuant to the authority hereby given, are hereby ratified and confirmed.

This Power of Attorney is made and executed pursuant to and by authority of the By-Law printed on the reverse hereof, duly adopted, as indicated, by the shareholders of the corporation.

In Witness Whereof, WESTERN SURETY COMPANY has caused these presents to be signed by its Vice President and its corporate seal to be hereto affixed on this 5th day of April, 2016.



WESTERN SURETY COMPANY

Paul T. Bruflat  
Paul T. Bruflat, Vice President

State of South Dakota }  
County of Minnehaha } ss

On this 5th day of April, 2016, before me personally came Paul T. Bruflat, to me known, who, being by me duly sworn, did depose and say: that he resides in the City of Sioux Falls, State of South Dakota; that he is the Vice President of WESTERN SURETY COMPANY described in and which executed the above instrument; that he knows the seal of said corporation; that the seal affixed to the said instrument is such corporate seal; that it was so affixed pursuant to authority given by the Board of Directors of said corporation and that he signed his name thereto pursuant to like authority, and acknowledges same to be the act and deed of said corporation.

My commission expires

June 23, 2021



J. Mohr  
J. Mohr, Notary Public

### CERTIFICATE

I, L. Nelson, Assistant Secretary of WESTERN SURETY COMPANY do hereby certify that the Power of Attorney hereinabove set forth is still in force, and further certify that the By-Law of the corporation printed on the reverse hereof is still in force. In testimony whereof I have hereunto subscribed my name and affixed the seal of the said corporation this 16th day of August, 2016.



WESTERN SURETY COMPANY

L. Nelson  
L. Nelson, Assistant Secretary

**Authorizing By-Law**

**ADOPTED BY THE SHAREHOLDERS OF WESTERN SURETY COMPANY**

This Power of Attorney is made and executed pursuant to and by authority of the following By-Law duly adopted by the shareholders of the Company.

Section 7. All bonds, policies, undertakings, Powers of Attorney, or other obligations of the corporation shall be executed in the corporate name of the Company by the President, Secretary, and Assistant Secretary, Treasurer, or any Vice President, or by such other officers as the Board of Directors may authorize. The President, any Vice President, Secretary, any Assistant Secretary, or the Treasurer may appoint Attorneys in Fact or agents who shall have authority to issue bonds, policies, or undertakings in the name of the Company. The corporate seal is not necessary for the validity of any bonds, policies, undertakings, Powers of Attorney or other obligations of the corporation. The signature of any such officer and the corporate seal may be printed by facsimile.

AGREEMENT ADDENDUM

In the event of conflict between this addendum and the agreement, this addendum shall control:

1. **DISPUTES** – Any references in the agreement to arbitration or to the jurisdiction of any court are hereby deleted. Disputes arising out of the agreement shall be presented to the West Virginia Court of Claims.
2. **HOLD HARMLESS** – Any provision requiring the Agency to indemnify or hold harmless any party is hereby deleted in its entirety.
3. **GOVERNING LAW** – The agreement shall be governed by the laws of the State of West Virginia. This provision replaces any references to any other State's governing law.
4. **TAXES** – Provisions in the agreement requiring the Agency to pay taxes are deleted. As a State entity, the Agency is exempt from Federal, State, and local taxes and will not pay taxes for any Vendor including individuals, nor will the Agency file any tax returns or reports on behalf of Vendor.
5. **PAYMENT** – Any reference to prepayment are deleted. Fees for software licenses, subscriptions, or maintenance are payable annually in advance. Payment for services will be in arrears.
6. **INTEREST** – Any provision for interest or charges on late payments is deleted. The Agency has no statutory authority to pay interest or late fees.
7. **NO WAIVER** – Any language in the agreement requiring the Agency to waive any rights, claims or defenses is hereby deleted.
8. **FISCAL YEAR FUNDING** – Service performed under the agreement may be continued in succeeding fiscal years for the term of the agreement, contingent upon funds being appropriated by the Legislature or otherwise being available for this service. In the event funds are not appropriated or otherwise available for this service, the agreement shall terminate without penalty on June 30. After that date, the agreement becomes of no effect and is null and void. However, the Agency agrees to use its best efforts to have the amounts contemplated under the agreement included in its budget. Non-appropriation or non-funding shall not be considered an event of default.
9. **STATUTE OF LIMITATIONS** – Any clauses limiting the time in which the Agency may bring suit against the Vendor, lessor, individual, or any other party are deleted.
10. **SIMILAR SERVICES** – Any provisions limiting the Agency's right to obtain similar services or equipment in the event of default or non-funding during the term of the agreement are hereby deleted.
11. **FEES OR COSTS** – The Agency recognizes an obligation to pay attorney's fees or costs only when assessed by a court of competent jurisdiction. Any other provision is invalid and considered null and void.
12. **ASSIGNMENT** – Notwithstanding any clause to the contrary, the Agency reserves the right to assign the agreement to another State of West Virginia agency, board or commission upon thirty (30) days written notice to the Vendor and Vendor shall obtain the written consent of Agency prior to assigning the agreement.
13. **LIMITATION OF LIABILITY** – The Agency, as a State entity, cannot agree to assume the potential liability of a Vendor. Accordingly, any provision limiting the Vendor's liability for direct damages is hereby deleted. Vendor's liability under the agreement shall not exceed three times the total value of the agreement. Limitations on special, incidental or consequential damages are acceptable. In addition, any limitation is null and void to the extent that it precludes any action for injury to persons or for damages to personal property.
14. **RIGHT TO TERMINATE** – Agency shall have the right to terminate the agreement upon thirty (30) days written notice to Vendor. Agency agrees to pay Vendor for services rendered or goods received prior to the effective date of termination.
15. **TERMINATION CHARGES** – Any provision requiring the Agency to pay a fixed amount or liquidated damages upon termination of the agreement is hereby deleted. The Agency may only agree to reimburse a Vendor for actual costs incurred or losses sustained during the current fiscal year due to wrongful termination by the Agency prior to the end of any current agreement term.
16. **RENEWAL** – Any references to automatic renewal is hereby deleted. The agreement may be renewed only upon mutual written agreement of the parties.
17. **INSURANCE** – Any provision requiring the Agency to purchase insurance for Vendor's property is deleted. The State of West Virginia is insured through the Board of Risk and Insurance Management, and will provide a certificate of property insurance upon request.
18. **RIGHT TO NOTICE** – Any provision for repossession of equipment without notice is hereby deleted. However, the Agency does recognize a right of repossession with notice.
19. **ACCELERATION** – Any reference to acceleration of payments in the event of default or non-funding is hereby deleted.
20. **CONFIDENTIALITY** – Any provision regarding confidentiality of the terms and conditions of the agreement is hereby deleted. State contracts are public records under the West Virginia Freedom of Information Act.
21. **AMENDMENTS** – All amendments, modifications, alterations or changes to the agreement shall be in writing and signed by both parties. No amendment, modification, alteration or change may be made to this addendum without the express written approval of the Purchasing Division and the Attorney General.
22. **DELIVERY** – All deliveries under the agreement will be FOB destination unless otherwise stated in the State's original solicitation. Any contrary delivery terms are hereby deleted.

ACCEPTED BY:  
STATE OF WEST VIRGINIA

Spending Unit: \_\_\_\_\_  
 Signed: \_\_\_\_\_  
 Title: \_\_\_\_\_  
 Date: \_\_\_\_\_

VENDOR

Company Name: Long's Security Camera Systems LLC  
 Signed: [Signature]  
 Title: Owner  
 Date: 8/30/2016

State of West Virginia  
**VENDOR PREFERENCE CERTIFICATE**

Certification and application is hereby made for Preference in accordance with **West Virginia Code, §5A-3-37**. (Does not apply to construction contracts). **West Virginia Code, §5A-3-37**, provides an opportunity for qualifying vendors to request (at the time of bid) preference for their residency status. Such preference is an evaluation method only and will be applied only to the cost bid in accordance with the **West Virginia Code**. This certificate for application is to be used to request such preference. The Purchasing Division will make the determination of the Vendor Preference, if applicable.

1.  **Application is made for 2.5% vendor preference for the reason checked:**  
Bidder is an individual resident vendor and has resided continuously in West Virginia for four (4) years immediately preceding the date of this certification; **or**,  
 Bidder is a partnership, association or corporation resident vendor and has maintained its headquarters or principal place of business continuously in West Virginia for four (4) years immediately preceding the date of this certification;  
 Bidder is a resident vendor partnership, association, or corporation with at least eighty percent of ownership interest of bidder held by another entity that meets the applicable four year residency requirement; **or**,  
 Bidder is a nonresident vendor which has an affiliate or subsidiary which employs a minimum of one hundred state residents and which has maintained its headquarters or principal place of business within West Virginia continuously for the four (4) years immediately preceding the date of this certification; **or**,
2.  **Application is made for 2.5% vendor preference for the reason checked:**  
Bidder is a resident vendor who certifies that, during the life of the contract, on average at least 75% of the employees working on the project being bid are residents of West Virginia who have resided in the state continuously for the two years immediately preceding submission of this bid; **or**,
3.  **Application is made for 2.5% vendor preference for the reason checked:**  
Bidder is a nonresident vendor that employs a minimum of one hundred state residents, or a nonresident vendor which has an affiliate or subsidiary which maintains its headquarters or principal place of business within West Virginia and employs a minimum of one hundred state residents, and for purposes of producing or distributing the commodities or completing the project which is the subject of the bidder's bid and continuously over the entire term of the project, on average at least seventy-five percent of the bidder's employees or the bidder's affiliate's or subsidiary's employees are residents of West Virginia who have resided in the state continuously for the two immediately preceding years and the vendor's bid; **or**,
4.  **Application is made for 5% vendor preference for the reason checked:**  
Bidder meets either the requirement of both subdivisions (1) and (2) or subdivision (1) and (3) as stated above; **or**,
5.  **Application is made for 3.5% vendor preference who is a veteran for the reason checked:**  
Bidder is an individual resident vendor who is a veteran of the United States armed forces, the reserves or the National Guard and has resided in West Virginia continuously for the four years immediately preceding the date on which the bid is submitted; **or**,
6.  **Application is made for 3.5% vendor preference who is a veteran for the reason checked:**  
Bidder is a resident vendor who is a veteran of the United States armed forces, the reserves or the National Guard, if, for purposes of producing or distributing the commodities or completing the project which is the subject of the vendor's bid and continuously over the entire term of the project, on average at least seventy-five percent of the vendor's employees are residents of West Virginia who have resided in the state continuously for the two immediately preceding years.
7.  **Application is made for preference as a non-resident small, women- and minority-owned business, in accordance with West Virginia Code §5A-3-59 and West Virginia Code of State Rules.**  
Bidder has been or expects to be approved prior to contract award by the Purchasing Division as a certified small, women- and minority-owned business.

Bidder understands if the Secretary of Revenue determines that a Bidder receiving preference has failed to continue to meet the requirements for such preference, the Secretary may order the Director of Purchasing to: (a) rescind the contract or purchase order; or (b) assess a penalty against such Bidder in an amount not to exceed 5% of the bid amount and that such penalty will be paid to the contracting agency or deducted from any unpaid balance on the contract or purchase order.

By submission of this certificate, Bidder agrees to disclose any reasonably requested information to the Purchasing Division and authorizes the Department of Revenue to disclose to the Director of Purchasing appropriate information verifying that Bidder has paid the required business taxes, provided that such information does not contain the amounts of taxes paid nor any other information deemed by the Tax Commissioner to be confidential.

Bidder hereby certifies that this certificate is true and accurate in all respects; and that if a contract is issued to Bidder and if anything contained within this certificate changes during the term of the contract, Bidder will notify the Purchasing Division in writing immediately.

Bidder: Louis Security Camera Systems LLC      Signed: [Signature]  
Date: 08/30/2016      Title: owner

\*Check any combination of preference consideration(s) indicated above, which you are entitled to receive.





Purchasing Division  
 2019 Washington Street East  
 Post Office Box 50130  
 Charleston, WV 25305-0130

State of West Virginia  
 Request for Quotation  
 04 - Audio/Video

Proc Folder: 184004

Doc Description: ADDENDUM #2 ONE TIME PURCHASE & COMPLETE INSTALL OF A CCTV

Proc Type: Central Purchase Order

Date Issued	Solicitation Closes	Solicitation No	Version
2016-08-19	2016-08-30 13:30:00	CRFQ 0506 WSH1700000001	3

**BID RECEIVING LOCATION**

BID CLERK  
 DEPARTMENT OF ADMINISTRATION  
 PURCHASING DIVISION  
 2019 WASHINGTON ST E  
 CHARLESTON WV 25305  
 US

**VENDOR**

Vendor Name, Address and Telephone Number:

Long's Security Camera Systems LLC  
 102 38th St SE  
 Charleston WV 25304

See attached Price Page

**FOR INFORMATION CONTACT THE BUYER**

April Battle  
 (304) 558-0067  
 april.e.battle@wv.gov

Signature X

FEIN #

20-3881980

DATE

09/29/2016

All offers subject to all terms and conditions contained in this solicitation



Purchasing Division  
 2019 Washington Street East  
 Post Office Box 50130  
 Charleston, WV 25305-0130

State of West Virginia  
 Request for Quotation  
 04 - Audio/Video

Proc Folder: 184004

Doc Description: ADDENDUM #1 ONE TIME PURCHASE & COMPLETE INSTALL OF A CCTV

Proc Type: Central Purchase Order

Date Issued	Solicitation Closes	Solicitation No	Version
2016-08-15	2016-08-30 13:30:00	CRFQ 0506 WSH1700000001	2

**BID RECEIVING LOCATION**

BID CLERK  
 DEPARTMENT OF ADMINISTRATION  
 PURCHASING DIVISION  
 2019 WASHINGTON ST E  
 CHARLESTON WV 25305  
 US

**VENDOR**

Vendor Name, Address and Telephone Number:

See attached addendum #3

**FOR INFORMATION CONTACT THE BUYER**

April Battle  
 (304) 558-0067  
 april.e.battle@wv.gov

Signature X

FEIN #

20-3881880

DATE

08/29/2016

All offers subject to all terms and conditions contained in this solicitation



Purchasing Division  
 2019 Washington Street East  
 Post Office Box 50130  
 Charleston, WV 25305-0130

State of West Virginia  
 Request for Quotation  
 09 - Construction

Proc Folder: 181627

Doc Description: Addendum No. 2 - Request for Quotation for Security Cameras

Proc Type: Central Purchase Order

Date Issued	Solicitation Closes	Solicitation No	Version
2016-07-26	2016-08-31 13:30:00	CRFQ 0702 TAX1600000017	3

**BID RECEIVING LOCATION**  
 BID CLERK  
 DEPARTMENT OF ADMINISTRATION  
 PURCHASING DIVISION  
 2019 WASHINGTON ST E  
 CHARLESTON WV 25305  
 US

**Vendor**  
 Vendor Name, Address and Telephone Number:  
 Longs Security Camera Systems LLC  
 102 38th ST SE.  
 Charleston WV 25304

08/30/16 12:43:43  
 WV Purchasing Division

FOR INFORMATION CONTACT THE BUYER  
 Michelle L Childers  
 (304) 558-2063  
 michelle.l.childers@wv.gov

Signature X  FEIN # 20-3881880 DATE 8-29-2016

All offers subject to all terms and conditions contained in this solicitation

**ADDITIONAL INFORMATION:**

Addendum

Addendum No. 02 issued to publish and distribute the attached information to the vendor community.  
 \*\*\*\*\*

The West Virginia State Purchasing Division is soliciting bids, on behalf of the Tax Division of the West Virginia Department of Revenue, to establish a one-time construction contract for the purchase of a Security Camera System(s) including installation, testing, employee training and three years of full warranty coverage, including time and materials. Installed system must have night vision, must have clarity at three hundred (300) feet in total darkness, and must provide three hundred sixty (360) degree coverage of the building exterior, including the parking lots to the side and rear of the building, sidewalks in front of, beside, and behind the building. Existing interior cameras will be replaced and additional interior cameras added. The cameras which are replaced will be sent to Surplus Property for disposition. In addition, the installed system must be capable of being remotely monitored from an off-site location, via a secure IP address.

INVOICE TO		SHIP TO	
OPERATIONS DIVISION TAX DIVISION OF PO BOX 11748		OPERATIONS DIVISION TAX DIVISION OF REVENUE CENTER 1001 LEE ST E, STE 3	
CHARLESTON	WV25339-1748	CHARLESTON	WV 25301-1725
US		US	

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Total Price
1	Security Cameras	0.00000			

Comm Code	Manufacturer	Specification	Model #
46171610			

**Extended Description :**

Security cameras needed to supply 360 degree coverage around the Revenue Center located at 1001 Lee St., East, Charleston, WV. All existing interior and exterior cameras will be replaced and additional interior and exterior cameras will be added.

*See attached Price Page*

Exhibit A - Pricing Page - CRFQ WSH1700000001

Item Number	Quantity	Description	Unit Cost	Extended Cost
4.1.1	43	Indoor IP Cameras - minimum of 1 megapixel 1280x720	205.39	8,831.77
4.1.2	10	Outdoor IP Cameras - minimum of 3 megapixels 1280x720	191.10	1,911.00
4.1.3	2	Network Video Recorder - include viewing software and able to accommodate the 129 cameras	10,183.58	20,367.16
4.1.4	5	Network Switches - 24 port switch with Power over Ethernet, 1 gigabit (10/100/1000)	451.10	2,255.50
4.1.5	1	Miscellaneous installation materials and accessories needed to install, commission, and operate equipment	1,000.00	1,000.00
4.1.6	1	Labor - Installation and labor to install and program CCTV system. Set up workstations and system to operate and function correctly	17,500.00	17,500.00
4.1.7	1	One year warranty on all material and labor	Ø	Ø
<b>TOTAL COST</b>				<b>51,865.43</b>

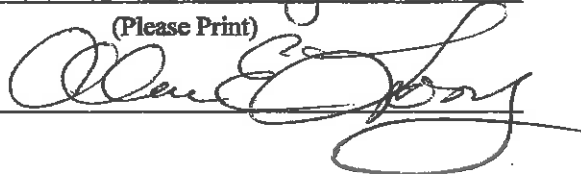
Vendor Name: Long's Security Camera Systems LLC

Vendor Address: 102 38th ST SE  
Charleston WV 25304

Vendor Phone/Fax Numbers: 304-925-0338 / 304-925-0338

Vendor Email: longscctv@suddenlink.net

Vendor Authorized Representative: ALAN E LONG  
(Please Print)

Vendor Authorized Representative Signature: 

**ADDENDUM ACKNOWLEDGEMENT FORM**  
**SOLICITATION NO.: WSH1700000001**

**Instructions:** Please acknowledge receipt of all addenda issued with this solicitation by completing this addendum acknowledgment form. Check the box next to each addendum received and sign below. Failure to acknowledge addenda may result in bid disqualification.

**Acknowledgment:** I hereby acknowledge receipt of the following addenda and have made the necessary revisions to my proposal, plans and/or specification, etc.

**Addendum Numbers Received:**

(Check the box next to each addendum received)

- |  |  |
|--|--|
| <input checked="" type="checkbox"/> Addendum No. 1 | <input type="checkbox"/> Addendum No. 6  |
| <input checked="" type="checkbox"/> Addendum No. 2 | <input type="checkbox"/> Addendum No. 7  |
| <input checked="" type="checkbox"/> Addendum No. 3 | <input type="checkbox"/> Addendum No. 8  |
| <input type="checkbox"/> Addendum No. 4            | <input type="checkbox"/> Addendum No. 9  |
| <input type="checkbox"/> Addendum No. 5            | <input type="checkbox"/> Addendum No. 10 |

I understand that failure to confirm the receipt of addenda may be cause for rejection of this bid. I further understand that that any verbal representation made or assumed to be made during any oral discussion held between Vendor's representatives and any state personnel is not binding. Only the information issued in writing and added to the specifications by an official addendum is binding.

Longs Security Camera Systems LLC  
Company  
[Signature]  
Authorized Signature  
08/29/2016  
Date

**NOTE:** This addendum acknowledgement should be submitted with the bid to expedite document processing.

## DS-9600NI-F24 (/H) (/I)

Series NVR



### Introduction:

The DS-9600NI-F24 (/H) (/I) series NVR (Network Video Recorder) is a new generation recorder developed by Hikvision independently. Combined with multiple advanced technologies, such as audio and video decoding technology, embedded system technology, storage technology, network technology and intelligent technology, it can both work alone as a recorder and cooperate with other device to build a comprehensive surveillance system.

The DS-9600NI-F24(/H) (/I) series NVR can be widely applied in the areas of finance, public security, military, communication, transportation, education, etc.

### Available Models:

DS-96128NI-F24, DS-96256NI-F24

DS-96128NI-F24/H, DS-96128NI-F24/I, DS-96128NI-F24/H/I

DS-96256NI-F24/H, DS-96256NI-F24/I, DS-96256NI-F24/H/I

### Main Features:

#### Professional and Reliable

- Pluggable HDD design provides a convenient HDD installation and maintenance way; Unique chassis based on patented design ensures environmental friendly and low-noise running.
- Adopt professional embedded hardware and software, and pioneering dual-OS design to ensure the reliability of system running.
- Support redundant power supply to improve the system stability.
- Adopt ANR technology to enhance the storage reliability when the network disconnected.
- Supports HDD hot swap with RAID0, RAID1, RAID5, RAID10 storage scheme configurable.
- Either normal or hot spare working mode is configurable to constitute an N+1 hot spare system.

#### HD Input

- Connectable to the third-party network cameras like ACTI, Arecont, AXIS, Bosch, Brickcom, Canon, ONVIF, PANASONIC, Pelco, PSIA, SAMSUNG, SANYO, SONY, Vivotek and ZAVIO.
- Up to 128/256 IP cameras can be connected.
- Support live view, storage, and playback of the connected camera at up to 8 megapixels resolution.

#### HD Output

- Simultaneous HDMI/VGA output as the main output and the HDMI2 works as the auxiliary output.
- Video outputs at up to 1920x1080 resolution.
- Powerful decoding capacity: DS-9600NI-F24/H and DS-9600NI-F24/H/I support decoding up to 44 channels at 1080P resolution, and provide 12 HDMI outputs for display on video wall.

#### HD Storage

- Up to 24 SATA hard disks can be connected, for both recording and backup.

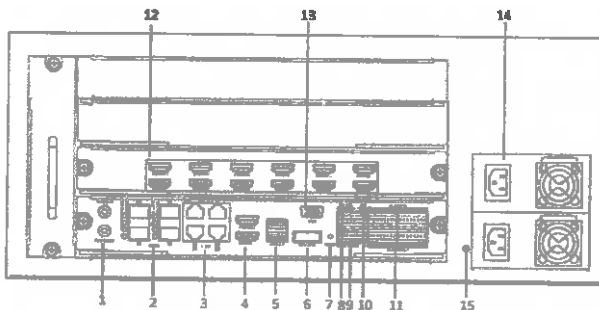
#### HD Transmission

- 4 self-adaptive 10M/100M/1000M network interfaces and 4 1000M optical fiber interfaces.

#### Various Applications

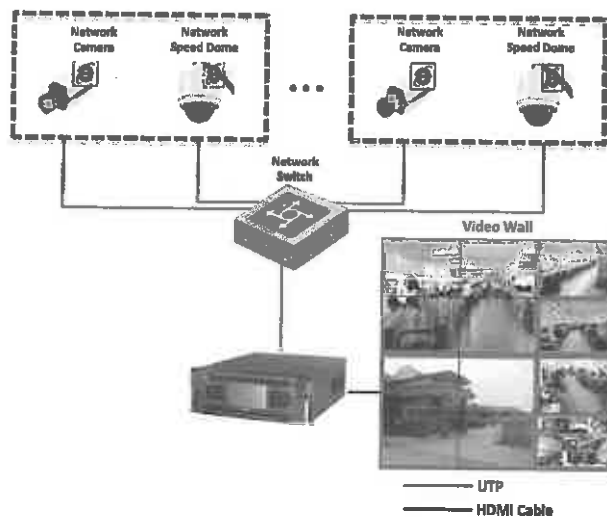
- Centralized management of IP cameras is supported, including configuration, information import/export, real-time information display, two-way audio, upgrade, etc.
- Connectable to smart IP cameras from Hikvision and the recording, playing back, and backing up of VCA alarms can be realized.
- VCA detection alarm is supported.
- VCA search for face detection, behavior analysis, people counting and heat map.
- New GUI and support starting record with one key.
- Realize instant playback for assigned channel during multi-channel display mode.
- Smart search for the selected area in the video; and smart playback to improve the playback efficiency.
- Support HDD quota and group modes; different capacity can be assigned to different channels.

### Physical Interfaces:



Index	Name
1	RCA connector for audio output and output
2	4 Fiber Optic Interfaces
3	4 LAN network interfaces
4	2 HDMI video output connectors
5	USB 3.0 Interfaces
6	miniSAS Interface (optional)
7	Reset the device.
8	RS-485 Interface
9	RS-232 Interface
10	Controller Port
11	ALARM IN and ALARM OUT
12	HDMI Output Extension Board (for /H and /H/I models only)
13	VGA Interface
14	100~240VAC Power Input (Dual Power Supplies)
15	GND

### Typical Application:



**Note:** The /H and /H/I models provide 12 HDMI outputs for video wall display.

## Specifications:

Model	DS-96128NI-F24, DS-96128NI-F24/H, DS-96128NI-F24/I, DS-96128NI-F24/H/I		DS-96256NI-F24, DS-96256NI-F24/H, DS-96256NI-F24/I, DS-96256NI-F24/H/I
Video/Audio input	IP video input	128-ch Up to 8MP resolution	256-ch
	Two-way audio	1-ch, RCA (2.0 Vp-p, 1kΩ)	
Network	Incoming bandwidth	400Mbps	640Mbps, or 400Mbps (when RAID is enabled)
	Outgoing bandwidth	400Mbps	400Mbps
	Remote connection	256	
Video/Audio output	Recording resolution	8MP/6MP/5MP/3MP/1080P/UXGA/720P/VGA/4CIF/DCIF/2CIF/CIF/QCIF	
	HDMI1/VGA output resolution	1-ch, 1920 × 1080P /60Hz, 1600 × 1200 /60Hz, 1280 × 1024 /60Hz, 1280 × 720 /60Hz, 1024 × 768 /60Hz	
	HDMI2 output	1-ch, 1920 × 1080P /60Hz, 1600 × 1200 /60Hz, 1280 × 1024 /60Hz, 1280 × 720 /60Hz, 1024 × 768 /60Hz	
	HDMI outputs (on HDMI Output Extension Board)	12-ch (for /H and /H/I models only), 1920 × 1080P /60Hz, 1600 × 1200 /60Hz, 1280 × 1024 /60Hz, 1280 × 720 /60Hz, 1024 × 768 /60Hz	
	LCD Screen	Available for /H and /H/I models only	
	Audio output	1-ch, RCA (2.0Vp-p, 1KΩ)	
Decoding	Live view / Playback resolution	8MP/6MP/5MP/3MP/1080P/UXGA/720P/VGA/4CIF/DCIF/2CIF/CIF/QCIF	
	Synchronous playback	16-ch	
	Capability	DS-96000NI-F24 and DS-96000NI-F24/I: 8-ch@1080P DS-96000NI-F24/H and DS-96000NI-F24/H/I: 44-ch@1080P	
Hard disk	SATA	24 SATA interfaces for 24 HDDs	
	miniSAS (Optional)	1 miniSAS interface	
	Capacity	Up to 6TB capacity for each HDD	
Disk array	Array type	RAID0, RAID1, RAID5, RAID10	
	Number of arrays	24	
External interface	Network interface	4, RJ-45 10 /100 /1000 Mbps self-adaptive Ethernet interface	
	Optic fiber interface	4, 1000 Mbps optic fiber interface	
	Serial interface	RS-232; RS-485; Keyboard	
	USB interface	Front panel: 1 ×USB 2.0; Rear panel: 2 ×USB 3.0	
	Alarm in/out	16 / 8	
General	Power supply	100 ~ 240 VAC, 50 ~ 60 Hz	
	Max. Power	600 W	
	Consumption (without hard disk)	≤ 100 W	
	Working temperature	-10°C ~ +55°C (14°F ~ 131°F)	
	Working humidity	10 % ~ 90 %	
	Chassis	19-inch rack-mounted 4U chassis	
	Dimensions(W × D × H)	447 × 528 × 472 mm (17.6" × 20.8" × 6.8")	
Weight(without hard disk)	≤ 28.1 Kg (61.9 lb)		

### Notes:

The formula to calculate the incoming bandwidth and the IP camera connected is:  $A = B/(C+D)$ .

A refers to the number of IP camera you connected.

B refers to the value of the incoming bandwidth.

C refers to the bitrate value of the main stream of the connected IP camera.

And D refers to the bitrate value of the sub-stream of the connected IP camera.

**Example:** The incoming bandwidth of DS-96128NI-F24 NVR is 400 Mbps and the IP camera to connect is with resolution of 720P (1280\*720) / 25 (30) fps. The bitrate for the main stream and sub-stream of the IP camera is set as 4Mbps and 1Mbps respectively.

In this example, B=400Mbps, C=4Mbps, D=1Mbps and  $A = B/(C+D) = 400 / (4+1) = 80$ . So the number of IP cameras can be connected with is 80.



**ATTACHMENT B**

**First Aid and CPR Training  
RESOURCE LIST**

COUNTY	ORGANIZATION	CONTACT INFORMATION	TIME AND DATES	COST
Kanawha	American Red Cross	(304) 340-3650	Log onto <a href="http://www.cwv-redcross.org">www.cwv-redcross.org</a> for schedule	\$25.00 CPR/Infant & Child; \$25.00 First Aid
	Charleston Area Medical Center	Francina Thomas (304) 539-6969	Call for schedule; varies	\$50.00
	First Aid & Safety Training (Johnny Winell, Certified CPR/First Aid Instructor)	(304) 341-8936 (pager) (304) 550-8161 (cell)	Call to schedule date and time; on site training available	Call for pricing; adult and pediatric First Aid/CPR after hours and Saturday trainings available; special arrangements for classes under 5
	Kanawha Ambulance Authority	Gary Davis (304) 345-2312 ext. 171	Usually last Friday of the month beginning at 5:30pm	\$10.00
	Victor Workman (Certified CPR/First Aid Instructor)	(304) 590-2143 (304) 595-5423	Call to schedule date and time	Call about pricing, he will give a good deal to providers or centers
Jackson	First Aid & Safety Training (Johnny Winell, Certified CPR/First Aid Instructor)	(304) 341-8936 (pager) (304) 550-8161 (cell)	Call to schedule date and time; on site training available	Call for pricing; adult and pediatric First Aid/CPR after hours and Saturday trainings available; special arrangements for classes under 5
	Jackson General Hospital	Nancy Games (304)373-1516	2 <sup>nd</sup> Monday of every month; begins at 8:30 and usually out by noon	\$25.00 per class or \$35.00 for both
	Parent Educator Resource Center	(304) 273-3545	Offers once in spring and once in fall	\$5.00
Clay	American Red Cross	(304) 340-3650	Log onto <a href="http://www.cwv.redcross.org">www.cwv.redcross.org</a> for schedule	\$25.00 CPR/Infant & Child \$25.00 First Aid
	Clay Ambulance Service	(304) 587-2554	Offered on Saturdays; call for times and locations	\$15.00
	First Aid & Safety Training (Johnny Winell, Certified CPR/First Aid Instructor)	(304) 341-8936 (pager) (304) 550-8161 (cell)	Call to schedule date and time; on site training available	Call for pricing; adult and pediatric First Aid/CPR after hours and Saturday trainings available; special arrangements for classes under 5
Roane	American Red Cross	(304) 485-7311	Call for dates and times	\$25.00 CPR/Infant & Child \$25.00 First Aid
	First Aid & Safety Training (Johnny Winell, Certified CPR/First Aid Instructor)	(304) 341-8936 (pager) (304) 550-8161 (cell)	Call to schedule date and time; on site training available	Call for pricing; adult and pediatric First Aid/CPR after hours and Saturday trainings available; special arrangements for classes under 5
	Roane County Emergency Squad	Jimmy Steenburgh (304) 927-3725	4 hour classes; schedule on an as needed basis	\$3.00 per card

## DS-2CD2512F-I(S)

## 1.3MP Mini Fixed Focal Network Camera



### Key features

- Up to 1.3 megapixel (1280 x 960) resolution
- HD real-time video
- -I: IR LEDs (up to 10m)
- DWDR & 3D DNR & BLC
- Onboard storage (up to 64 GB)
- -S: Audio I/O, Alarm I/O
- IP66 protection
- Vandal-proof housing

### Accessories



DS-1272ZJ-120B  
Wall mount



DS-1270ZJ-120  
Pendant cap for 25x2  
mini dome (bracket  
adapters included)

### Specifications

DS-2CD2512F-I(S)	
<b>General</b>	
Image sensor	1/3" progressive scan CMOS
Min. illumination	0.19 lux@F2.0, AGC on 0 lux with IR
Shutter time	1/30s ~ 1/100,000s
Lens	4mm@F2.0, angle of view: 75.8° (2.8mm, 6mm optional)
Lens mount	M12
Day & night	ICR
Digital noise reduction	3D DNR
Wide dynamic range	Digital WDR
Backlight compensation	Yes, zone configurable
<b>Video &amp; Audio</b>	
Video compression	H.264 / MJPEG
H.264 compression profile	Main profile
Bit rate	32 Kbps ~ 16 Mbps
<b>Image</b>	
Max. image resolution	1280 x 960
Frame rate	60Hz: 30fps (1280 x 960), 30fps (1280 x 720)
Image settings	Saturation, brightness, contrast adjustable through client software or web browser
<b>Network</b>	
Network storage	NAS
Alarm trigger	Motion detection, tampering alarm, network disconnect, IP address conflict, storage exception
Protocols	TCP/IP, HTTP, DHCP, DNS, DDNS, RTP, RTSP, PPPoE, SMTP, NTP, SNMP, HTTPS, FTP, 802.1x, QoS
System compatibility	ONVIF, PSIA, CGI
General functionalities	Flickerless, dual stream, heartbeat, mirror, user authentication, video mask, watermark
<b>Interface</b>	
Communication interface	1 RJ45 10M / 100M ethernet port
On-board storage	Built-in Micro SD card slot, up to 64 GB
<b>Environment</b>	
Operating conditions	-30 °C ~ 60 °C (-22 °F ~ 140 °F), humidity 95% or less (non-condensing)
Power supply	DC12V ± 10%, PoE (802.3af)
Power consumption	Max. 7W
Impact protection	IEC60068-2-75Eh, 50J; EN50102, up to IK10
Ingress protection level	IP66
IR range	Up to 10m
Dimensions	99.9 × 97.5 × 46.5 mm (3.93" × 3.84" × 1.83")
Weight	250g (0.55 lbs)

### Available models

DS-2CD2512F-I, DS-2CD2512F-I(S)

\* -S (special order): Audio I/O interface and Alarm I/O interface.

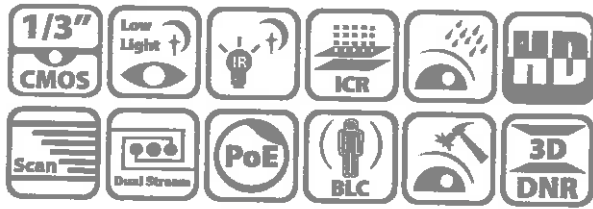
\* -I: IR LEDs, up to 10m.

\* Includes Single Gang Box adapter plate.

DS-2CD2122F-I(S)(W) (2.0MP)

DS-2CD2132F-I(S)(W) (3.0MP)

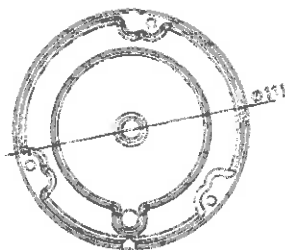
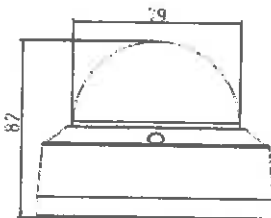
IR Fixed Dome Network Camera



Key features

- 2MP / 3MP high resolution
- HD real-time video
- 3D DNR & DWDR & BLC
- IR LEDs: up to 30m
- IP66
- Vandal-proof
- PoE
- Onboard storage (up to 64GB)
- Wi-Fi optional

Dimensions



Available models

2.0MP:

DS-2CD2122F-I, DS-2CD2122F-IS,

DS-2CD2122F-IW, DS-2CD2122F-IWS

3.0MP:

DS-2CD2132F-I, DS-2CD2132F-IS,

DS-2CD2132F-IW, DS-2CD2132F-IWS

\* 1.3MP model is also available – DS-2CD2112F-I

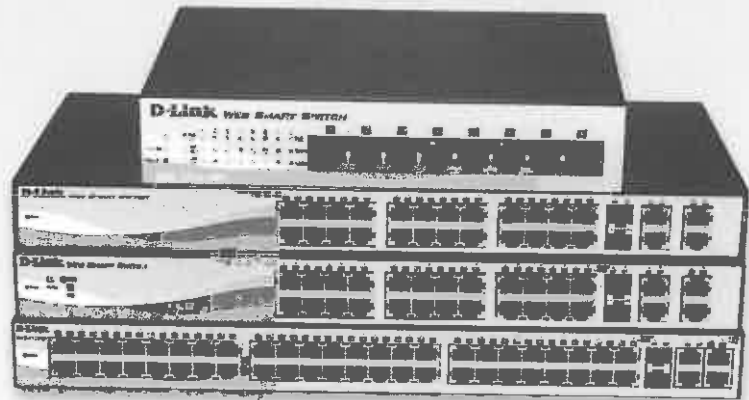
\* -S: Audio I/O Interface, Alarm I/O interface.

-W: Built-in Wi-Fi

<b>Camera</b>		
Image sensor	1/3" Progressive Scan CMOS	
Min. Illumination	0.01 lux@F1.2, AGC ON, 0 lux with IR	0.07Lux @F1.2, AGC ON, 0 lux with IR
Shutter time	1/3s ~ 1/100,100s	
Lens	4mm @ F2.0 (2.8mm, 6mm optional)	4mm @ F2.0 (2.8mm, 6mm optional)
	Angle of view:	2048 x 1536: Angle of view: 86°(2.8mm), 70°(4mm), 43.3°(6mm)
	98.5°(2.8mm), 79°(4mm), 49°(6mm)	1920 x 1080: Angle of view: 98.5°(2.8mm), 79°(4mm), 49°(6mm)
Lens mount	M12	
Angle adjustment	Pan: 0° ~ 355°, Tilt: 0° ~ 65°, Rotation: 0 ~ 360°	
Digital noise reduction	3D DNR	
Wide dynamic range	Digital WDR	
Day & night	IR cut filter with auto switch	
Compression Standard		
Video compression	H.264 / MJPEG	
H.264 codec profile	Main profile	
Bit rate	32 Kbps ~ 16 Mbps	
Dual stream	Yes	
<b>Image</b>		
Max. Image Resolution	1920 x 1080	2048 x 1536
Frame rate	50Hz: 25fps (1920 x 1080), 25fps (1280 x 720)	50Hz: 20fps (2048 x 1536), 25fps (1920 x 1080), 25fps (1280 x 720)
	60Hz: 30fps (1920 x 1080), 30fps (1280 x 720)	60Hz: 20fps (2048 x 1536), 30fps (1920 x 1080), 30fps (1280 x 720)
Image settings	Saturation, brightness, sharpness, contrast, sharpness adjustable through client software or web browser	
BLC	Yes, zone configurable	
ROI	Yes, up to 3 configurable areas	
<b>Network</b>		
Network storage	Local storage: Built-in Micro SD/SDHC/SDXC card slot, up to 64 GB ; NAS	
Alarm trigger	Face detection, line crossing detection, intrusion detection, scene change detection, Motion detection, Dynamic Analysis, Tampering alarm, Network disconnect, IP address conflict, Storage full, Storage error	
Protocols	TCP/IP, ICMP, HTTP, HTTPS, FTP, DHCP, DNS, DDNS, RTP, RTSP, RTCP, PPPoE, NTP, UPnP, SMTP, SNMP, IGMP, 802.1X, QoS, IPv6, Bonjour	
System compatibility	ONVIF, PSIA, CGI, ISAPI	
General functionalities	User Authentication, Watermark	
General function	Flickerless, dual stream, heartbeat, mirror, password protection, watermark	
<b>Interface</b>		
Communication Interface	1 RJ45 10M/100M Ethernet Interface	
Wi-Fi Specification (Only for -W model)		
Wireless Standards	IEEE802.11b, 802.11g, 802.11n Draft	
Frequency Range	2.4 GHz ~ 2.4835 GHz	
Channel Bandwidth	20/40MHz Support	
Protocols	802.11b: CCK, QPSK, BPSK ; 802.11g/n: OFDM	
Security	64/128-bit WEP; WPA/WPA2, WPA-PSK/WPA2-PSK, WPS	
Transmit Output Power	11b: 17±1.5dBm @ 11Mbps ; 11g: 14±1.5dBm @ 54Mbps ; 11n: 12.5±1.5dBm	
Receive Sensitivity	11b: -90dBm @ 11Mbps (Typical) ; 11g: -75dBm @ 54Mbps (Typical) ; 11n: -74dBm (Typical)	
Transfer Rates	11b: 11Mbps ; 11g: 54Mbps ; 11n: up to 150Mbps	
Wireless Range	Outdoor: 200m, Indoor: 50m ; *The performance varies based on actual environment.	
Wireless Standards	IEEE802.11b, 802.11g, 802.11n Draft	
<b>General</b>		
Operating conditions	-30 °C ~ 60 °C (-22 °F ~ 140 °F) ; Humidity 95% or less (non-condensing)	
Power supply	12 V DC ± 10% ; PoE (802.3af)	
Power consumption	Max. 5 W (Max. 7 W with IR cut filter on)	
Impact protection	IEC60068-2-75Eh, 20; EN50102, up to IK10 -W: EN50102, up to IK8	
Ingress protection	IP66	
IR range	30 meters	
Dimensions	Φ111 x 82 (4.4" x 3.2")	
Weight	500g (1.1 lbs)	

## Product Highlights

- Class leading performance  
Higher switching capacity and faster packet forwarding rate.
- Advanced L2 features  
Managed switch features without the complexity and high cost.
- Enhanced security  
Smart binding technology prevents illicit access to your network.
- Optimised for VoIP and IP surveillance  
Automatic prioritisation of VoIP and IP surveillance traffic without complicated setup.
- IPv6 ready  
IPv6 Compliant Logo Phase 2
- D-LinkGreen  
Advanced power saving technologies



DES-1210-08P/28/28P/52

## Fast Ethernet Smart Switches

### Key Features

#### Green Technology

- Fanless Design – silent operation\*
- Time-based PoE

#### Security Features

- Access Control List
- D-Link Safeguard Engine CPU from malicious traffic
- Port Security
- ARP Spoofing
- DHCP server screening
- Smart binding

#### Intuitive Management

- IPv4/ IPv6 Dual Stack
- IPv6 management
- Web GUI (supports 10 languages)
- SmartConsole utility
- SNMP and RMON
- Simplified CLI through Telnet

#### VoIP & IP Surveillance

- Highest priority for VoIP services
- Auto Voice VLAN

#### QoS

- Ensures efficient delivery of mission critical data
- Layer 2 QoS (4 queues)
- Layer 3 CoS (DSCP)

#### Advanced Features

- Loopback Detection automatically disables a port when a loop is detected
- Cable Diagnostics allows administrators to determine the cable status
- Rapid Spanning Tree – prevents loops and ensures availability
- IGMP snooping - save bandwidth on multicast traffic
- Asymmetric VLAN

The DES-1210 Series is the latest generation of Smart Switches. Equipped with 8, 24 or 48 Fast Ethernet ports, 2 Gigabit ports<sup>2</sup> and 2 combo Gigabit/SFP ports<sup>2</sup>, this series offers all the features needed in a small and medium business, without the complexity or cost involved. The built-in web interface and PC based SmartConsole Utility make these switches easy to deploy, configure and troubleshoot. Its complete set of features allows for seamless integration in every environment.

The PoE option is available on the 8 and 24 port members of the family. Integrating technologies such as time-based PoE which allows the power to be shut off at a predetermined time, saving power on VoIP phones, Wireless Access Points or any other PoE equipment. The DES-1210-28P utilises Smart Fan feature, automatically turning on the system fans only when necessary. This not only saves energy and cost but it also extends the lifespan of the switch. The DES-1210-28P is also compliant with the new PoE+ standard, enabling it to feed up to 30 Watts to connected devices.

### Extensive set of Features

Equipped with a complete line-up of features, these switches include Quality of Service, Port Trunking, Spanning Tree and IGMP snooping. Network monitoring and maintenance features include Port Mirroring, Loopback Detection and the innovative Cable Diagnostics. With Cable diagnostics, the switch will flag a faulty Ethernet cable connected to any of its ports, detailing the type of error detected.

<sup>1</sup>Except DES-1210-28P

<sup>2</sup>Not available for the DES-1210-08P

### Ready for network convergence

These switches are ideal for converged networks, where IP telephony/VoIP, IP surveillance systems and traditional data traffic are integrated in the data flow. The Auto Voice and Auto Surveillance VLAN features will automatically place these types of traffic on separate VLANs, thus guaranteeing the confidentiality, prioritisation and quality of these services on the network.

### Secure your Network

The DES-1210 series support RADIUS authentication, to ensure that only authorised users are able to log into the network. In addition, the Access Control List (ACL) feature further enhances security by ensuring that network resources are accessible only by their legitimate users. In addition, the DES-1210 Series protects against the most widespread network attacks, such as ARP spoofing or rogue DHCP servers. Smart Binding manages unwanted access to your network. This is done by checking IP and MAC address on a particular port against a pre-configured database before allowing or denying access.

### Avoid Network Disruption

D-Link's innovative Safeguard Engine protects against traffic flooding caused by broadcast storms or virus attacks, blocking traffic that reaches the definable threshold and avoiding network lock-ups before they occur. Spanning Tree (STP) and Rapid Spanning Tree (RSTP) allow for redundant paths in a network to ensure servers and other resources are always available.

### Versatile Management

The new generation of Smart switches is provided with an intuitive PC-based SmartConsole utility and a friendly web interface that enables administrators to configure and control their network down to the port level. The SmartConsole automatically discovers multiple D-Link Web Smart Switches within the same network segment, so administrators can access all of them even before they have been configured. This allows for very quick deployments and initial setups, including firmware upgrades. For more advanced administrators, the DES-1210 series supports a Command Line Interface (CLI) accessible with Telnet.

## D-Link Assist

Rapid Response Support

If the worst should happen to your network you need the very best support and fast. Downtime costs your business money. D-Link Assist maximises your uptime by solving technical problems quickly and effectively. Our highly trained technicians are on standby around the clock, ensuring that award-winning support is only a phone call away.

With a choice of three affordable service offerings covering all D-Link business products, you can select the package that suits you best.

**D-Link Assist Gold - for comprehensive 24-hour support**  
D-Link Assist Gold is perfect for mission-critical environments where maximum uptime is a high priority. It guarantees four hour around-the-clock response. Cover applies 24/7 for every day of the year including holidays.

**D-Link Assist Silver - for prompt same-day assistance**  
D-Link Assist Silver is designed for 'high availability' businesses that require rapid response within regular working hours. It provides a four hour response service Monday to Friday from 8am to 5pm, excluding holidays.

**D-Link Assist Bronze - for guaranteed response on the next business day**  
D-Link Assist Bronze is a highly cost-effective support solution for less critical environments. Response is guaranteed within eight business hours Monday to Friday from 8am to 5pm, excluding holidays.

D-Link Assist can be purchased together with any D-Link business product. So whether you're buying switching, wireless, storage, security or IP Surveillance equipment from D-Link, your peace of mind is guaranteed. D-Link Assist also offers installation and configuration services to get your new hardware working quickly and correctly.

Technical Specifications	DES-1210-08P	DES-1210-28	DES-1210-28P	DES-1210-52
<b>General</b>				
Size	• Desktop	• 19" rack mountable, 1U		
Interface	• 8 10/100BASE-TX	• 24 10/100BASE-TX • 2 1000BASE-T • 2 Combo 1000BASE-T/SFP	• 24 10/100BASE-TXPoE • 2 1000BASE-T • 2 Combo 1000BASE-T/SFP	• 48 10/100BASE-TX • 2 1000BASE-T • 2 Combo 1000BASE-T/SFP
Port Standards	• IEEE 802.3 Ethernet • IEEE 802.3u Fast Ethernet • Ethernet	• IEEE 802.3 Ethernet • IEEE 802.3u Fast Ethernet • IEEE 802.3ab Gigabit Ethernet • IEEE 802.3z Gigabit Ethernet (fiber)		
Auto negotiation	• Yes			
IEEE 802.3x Flow Control	• Yes			
Auto MDI/MDIX	• Yes			
<b>Performance</b>				
Switching Capacity	• 1.6 Gbps	• 12.8 Gbps	• 12.8 Gbps	• 17.6 Gbps
64-Byte Packet Forwarding Rate	• 1.19 Gbps	• 9.5 Mpps	• 9.5 Mpps	• 13.1 Mpps
MAC Address Table Size	• 8k Entries			
Flash Memory	• 16 MB			
Transmission Method	• Store-and-forward			
Packet Buffer Memory	• 384KB	• 512kb	• 512kb	• 1 MB
<b>PoE</b>				
PoE Standard	• 802.3af		• 802.3af and 802.3at	
PoE Capable Ports	• Port 1-8 upto 15.4 watts per port		• Port 1-4 upto 15.4 or 30 watts per port Port 5-24 upto 15.4 watts per port	
PoE Power Budget	• 72 watts		• 193 watts	
<b>LEDs</b>				
Power (Per Device)	• Yes			
Console (Per Device)	• Yes			
Link/Activity/Speed (Per Port)	• Yes			
<b>Physical &amp; Environmental</b>				
MTBF (Hours)	• 274,382	• 356,242	• 205,416	• 592,770
Acoustics	• 0 dB	• 0 dB	• 53.9 dB	• 0 dB
Heat Dissipation	• 305.03 BTU/hr	• 60.05 BTU per hour	• 866.65 BTU per hour	• 98.61 BTU per hour
Power Input	• 100 to 240VAC, 50 to 60 Hz Internal Universal Power Supply			
Max Power Consumption	• 89.4 Watts (PoE on) • 9.6 Watts (PoE off)	• 13.4 watts	• 254 watts (PoE on), • 26.4 watts (PoE off)	• 28.9 watts
Dimensions (W x D x H)	• 190 x 120 x 38 mm	• 440 x 140 x 44 mm	• 440 x 250 x 44 mm	• 440 x 250 x 44 mm
Fan Quantity	• Fanless	• Fanless	3 Smart Fans <sup>1</sup>	• Fanless
Operating Temperature	• 0 to 40° C			
Storage Temperature	• -10 to 70° C			
Operating Humidity	• 5% to 95% non-condensing			
Emission (EMI)	• FCC Class A, CE Class A, VCCI Class A, IC, C-Tick			
Safety	• cUL, LVD			

<sup>1</sup>Default fan speed is low. Fan switches to high speed automatically at 33° C ambient temperature.

### Software Features

#### L2 Features

- MAC Address Table
  - 8K entries
- Flow Control
  - 802.3x Flow Control
- HOL Blocking Prevention
- IGMP Snooping
  - IGMP v1/v2 Snooping
  - Supports 256 IGMP groups
- Supports at least 64 static multicast addresses
  - IGMP per VLAN
  - Supports IGMP Querier
- Spanning Tree Protocol
  - 802.1D STP
  - 802.1w RSTP
- Loopback Detection
- 802.3ad Link Aggregation
  - 4 groups per device (DES-1210-08P)
  - 14 groups per device (DES-1210-28/28P)
  - 26 groups per device (DES-1210-52)
  - 8 ports per group
- Port Mirroring
  - One-to-One
  - Many-to-One
  - Supports Mirroring for Tx/Rx/Both
- Cable Diagnostics
- Configurable Auto MDI/MDIX
- Multicast Filtering
  - Forwards all unregistered groups
  - Filters all unregistered groups

#### VLAN

- 802.1Q
- VLAN Group
  - Max. 256 static VLAN groups
  - Max. 4094 VIDs
- Management VLAN
- Asymmetric VLAN
- Auto Voice VLAN
  - Max. 10 user-defined OUI
  - Max. 8 default OUI

#### QoS (Quality of Service)

- 802.1p Quality of Service
- 4 queues per port
- Queue Handling
  - Strict
  - Weighted Round Robin (WRR)
- CoS based on
  - 802.1p Priority Queues
  - DSCP
  - ToS
- Bandwidth Control
  - Port-based (Ingress/Egress, min. granularity 64 Kb/s for 10/100 Mbps and 1850 Kb/s for 1000 Mbps)

#### Access Control List (ACL)

- Max. 50 profiles
- Max. 200 rules shared by profiles
- ACL based on
  - MAC Address
  - IPv4 Address
  - ICMP/IGMP/TCP/UDP
  - VLAN ID
  - 802.1p Priority Queues
  - DSCP
- ACL Actions
  - Permit
  - Deny

#### Security

- 802.1X
- Port Security
  - Supports up to 64 MAC addresses per port
- Broadcast/Multicast/Unicast Storm Control
- Static MAC
- D-Link Safeguard Engine
- DHCP Server Screening
- ARP Spoofing Prevention
  - Max. 64 entries
- SSL2
  - Supports v1/v2/v3
  - Supports IPv4
- Smart Binding

#### MIB

- 1213 MIB II
- 1493 Bridge MIB
- 1907 SNMP v2 MIB
- 1215 Trap Convention MIB
- 2233 Interface Group MIB
- D-Link Private MIB
- Power-Ethernet MIB
- LLDP MIB†

#### RFC Standard Compliance

- RFC 768 UDP
- RFC 791 IP
- RFC 792 ICMP
- RFC 793 TCP
- RFC 826 ARP
- RFC 854 Telnet Server
- RFC 855 Telnet Server
- RFC 856 Telnet Binary Transmission
- RFC 858 Telnet Server
- RFC 896 Congestion Control in TCP/IP Network
- RFC 903 Reverse Address

#### Resolution Protocol

- RFC 951 BootP Client
- RFC 1155 MIB
- RFC 1157 SNMP v1
- RFC 1191 Path MTU Discovery
- RFC 1212 Concise MIB

#### Definition

- RFC 1213 MIB II, IF MIB
- RFC 1215 Traps for use with the SNMP
- RFC 1239 Standard MIB
- RFC 1350 TFTP
- RFC 1493 Bridge MIB
- RFC 1519 CIDR
- RFC 1945 HTTP/1.0
- RFC 2131 DHCP
- RFC 2132 DHCP Options and BOOTP Vendor Extensions
- RFC 2138 Radius

#### Authentication

- RFC 2233 Interface MIB
- RFC 2578 Structure of Management Information Version 2 (SMIV2)
- RFC 2647 802.1p
- RFC 3416 SNMP
- RFC 3417 SNMP
- RFC 3621 Power Ethernet

#### Management

- Web-based GUI
- Compact CLI through Telnet
- Telnet Server
- SmartConsole Utility
- TFTP Client
- SNMP
  - Supports v1/v2/v3
- SNMP Trap
- Trap for SmartConsole Utility
- System Log
  - Max. 500 log entries
  - Supports IPv4 log server
- BootP/DHCP Client
- Time Setting
- SNTP
- LLDP, LLDP-MED
- Time-based PoE
- IPv6 Management
- RMON v1 group 1, 2, 3, 9

†Except DES-1210-28P

Optional SFP Transceivers	
DEM-310GT	• 1000BASE-LX, Single-mode, 10 km
DEM-311GT	• 1000BASE-SX, Multi-mode, 550 m
DEM-312GT2	• 1000BASE-SX, Multi-mode, 2 km
DEM-314GT	• 1000BASE-LX, Single-mode, 50 km
DEM-315GT	• 1000BASE-LX, Single-mode, 80 km
DEM-210	• 1000BASE-LX, Single-mode, 15 km
DEM-211	• 1000BASE-LX, Single-mode, 2 km
Optional WDM SFP Transceivers	
DEM-220T	• 100BASE-BX, Wavelength Tx: 1550nm Rx: 1310nm, Single-mode, 20km Optional Rx: 1310nm, Single-mode, 20km Optional
DEM-220R	• 100BASE-BX, Wavelength Tx: 1310nm Rx: 1550nm, Single-mode, 20km Rx: 1550nm, Single-mode, 20km
DEM-330T	• 1000BASE-LX, Wavelength Tx: 1550nm Rx: 1310nm, Single-mode, 10km Rx: 1310nm, Single-mode, 10km
DEM-330R	• 1000BASE-LX, Wavelength Tx: 1310nm Rx: 1550nm, Single-mode, 10km
DEM-331T	• 1000BASE-LX, Wavelength Tx: 1550nm Rx: 1310nm, Single-mode, 40km
DEM-331R	• 1000BASE-LX, Wavelength Tx: 1310nm Rx: 1550nm, Single-mode, 40km
Optional Management Software	
DV-600S	• D-View 6.0 Network Management System (Standard Edition)
DV-600P	• D-View 6.0 Network Management System (Professional Edition)
DV-601P	• E2ES Console Plugin for D-View 6.0



For more information: [www.dlink.com](http://www.dlink.com)

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