



GPISD Wireless Infrastructure Proposal

E-Rate Funding Year (2017-2018)

Gregory-Portland Independent School District



Submitted By

Joe Camareno

Layer 3 Communications, LLC

512-587-0390

SPIN Number: 143026409

December 12, 2017



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1 EXECUTIVE SUMMARY – LAYER 3 COMMUNICATIONS

Layer 3 Communications is thankful to have the opportunity to be of potential service to Gregory-Portland ISD in this wireless initiative. As does Gregory-Portland ISD, in the education world, Layer 3 Communications has a reputation for “transforming” the way wireless infrastructures are deployed. As a result, we are looked at throughout Texas as one of the true leaders in deploying complex wireless and secure network infrastructures in educational and commercial markets alike. The pages that follow will more clearly articulate our proposed design and implementation plans, and we hope that once you have evaluated this proposal, you will see evidence of why our experience and track record is so highly regarded. To-date this experience and track record has awarded us accordingly:

- Three of the top five ISD’s in Texas look to us as their go-to partners for their Aruba wireless network integration, with more than 50 Texas ISDs counted as valued partners.
- Multiple Partner-of-the-Year awards from Aruba Networks, including their highest levels of nationwide recognition for both sales and demonstrated service capabilities.
- Charter and sitting member of Aruba’s VAR council influencing both policy and products on behalf of our clients.

A partial list of the Texas school district that have trusted us in a similar way that Gregory-Portland has in the past are Cy-Fair ISD, Austin ISD, and Northside ISD. All of which represent Aruba access points supported by wireless management and BYOD solutions. Additional selected school districts in Texas where we have deployed similarly proposed wireless solutions include Spring ISD, Klein ISD, Pflugerville ISD, Harlandale ISD, Clear Creek ISD, Friendswood ISD, Tomball ISD, Angleton ISD, Victoria ISD, Santa Fe ISD, Eanes ISD, Deer Park ISD, and College Station ISD. And speaking of College Station, Texas A&M also counts on Layer 3 for their wireless infrastructure.

As we mentioned above, Layer 3 Communications leads the pack in transforming the way services are delivered across wired and wireless networks. This philosophy is at the core of how we have expanded our business together with thought-leading manufactures, and by developing our own innovative virtualization, data center, and security practices, and by selectively adding next generation transformative architectures. Aruba Networks represents one of these transformative architectures.

Layer 3 Communications has three strategically located Texas offices in San Antonio, Houston, and Austin, and a sales presence in the Valley. We have strong network engineering and project management benches in each of these cities, and warehousing, staging, and interoperability labs in our San Antonio and Houston locations.

Again, we are grateful to have this opportunity to be of service to your wireless network technology team, and to all of Gregory-Portland ISD. We look forward to applying our experience to support your success.

2 LAYER 3 QUALIFICATIONS, EXPERIENCE, AND REFERENCES

2.1 Description of Qualifications

Layer 3 Communication's has designed, deployed, and supported large-scale, complex networked solutions for major school districts across the south, and corporations with nationwide and worldwide footprints. We have already mentioned several of the larger school systems in Texas where we are valued-partners. Notable systems outside of Texas where we have provided similar services are Cobb and Fulton County School Districts, the 3rd and 4th largest districts in Georgia

The complex nature of these large-scale networks requires a combination of strong engineering talent, disciplined best-practice policies, heavy investments in training and lab equipment, and integrity in all aspects of our client relationships. We have integrated products that we partner with, including Aruba, Avaya, Brocade, F5, Juniper, FireEye, Fortinet, and Palo Alto, amongst others. And we have integrated these with products from endless manufactures, such as Cisco, IBM, Blue Coat, Apple, iBoss, Lightspeed, Google, and Microsoft. We have executed professional services engagements from wireless and security audits, to SIEM selections, and we have documented and executed remediation requirements on worldwide security architectures. **But the key remains, our ability to hire and retain the most qualified network engineering talent available. Our ratio of engineers to sales is 3:1, and our engineering retention rate is in excess of 95% over the life of our company.**

Layer 3 Communications will take complete ownership of all aspects of this project through the use of our own internal engineering and project management teams.

2.2 Staffing

Resource	Involvement	Responsibilities	Experience
Wireless/Data Network Engineer(s) – Nancie Gaddis	Overall responsibility for execution of engagement tasks.	<input type="checkbox"/> Conducts Network Architecture review <input type="checkbox"/> Implementation <input type="checkbox"/> Prepares deliverables <input type="checkbox"/> Troubleshoots & isolates problems	Nancie Gaddis: 20+ years of experience
Project/Installation Manager Kelly Hartman	Resource planning, issue escalation	<input type="checkbox"/> Coordinate any field modifications that need to occur. <input type="checkbox"/> Ensure schedules are met and customer is happy with progress.	Kelly Hartman: Project manager and on-site foreman; 10 years of experience
Account Management- Joe Camareno	Liaison between G-P ISD and L3C	<input type="checkbox"/> Resolves issues related to product problems. <input type="checkbox"/> Overall team manager; facilitates communication with all parties. <input type="checkbox"/> Handles customer ordering, logistics, materials handling, etc.	<input type="checkbox"/> 23+ years experience managing major relationships and projects

3 SCOPE OF WORK

The following sections define the scope of work to be performed on behalf of Gregory-Portland ISD by Layer 3 Communications. While these steps are enumerated in sequence, it should be noted that many of these services would occur either in parallel with other tasks, as defined by the project timetable to be agreed upon prior to project launch.

3.1 Network Design

Layer 3 Communications will work with Gregory-Portland ISD's staff to validate the specified WLAN design incorporating the specified hardware.

This network design process will be conducted in accordance with the Layer 3 Communications methodology and is managed in phases:

- Project initiation including preliminary information gathering
- Data collection through meetings, interviews, and existing documentation review
- Walkthrough of campuses to examine building space.
- Preparation of results, findings, and recommendations.

Layer 3 Communications will:

- Review existing network documentation
- Review configurations from existing hardware
- Review routing and forwarding
- Inventory settings for WLAN on a per Site basis:
- Meet with Gregory-Portland ISD staff to validate/determine the following:
 - IP addressing and VLAN scaling
 - Integration with content filtering if applicable
 - Switch port configuration
 - Authentication and security settings
- Collaborate on network design consisting of:
 - Wireless design
 - Wireless SSIDs:

3.2 Staging, Pre-Configuration, and Testing

Layer 3 Communications will perform the following staging steps on access points to help ensure a smooth efficient installation:

- Take APs out of box to install mounting clip
- Note the AP serial numbers and MAC addresses into a spreadsheet that is used to assign an AP number that will correspond to the maps provided. This spreadsheet will also include the room number or location where the AP was installed.
- Label AP with provided labels from district
- Discard unnecessary materials included in box
- Mark AP boxes for deployment to specific locations
- Prepare any special boxes or mounts needed for installation
- Apply pre-designed configurations per the design process

Deliverables:

- *APs prepped for physical installation*
- *Qualified hardware*
- *Applied configurations*
- *Labels applied to APs*
- *AP boxes labeled to identify location/room for installation*

3.3 Test Plan

After the installation is complete the following test plan will be executed with the assistance of a G-PISD staff member. G-PISD will need to verify operation and provide customer sign off for each item below.

- Layer 3 Communications will place a test AP in a configured AP-group to verify each SSID is available.
- Layer 3 Communications will test 802.1X authentication from a G-PISD district machine configured with the preferred group policies.
- Layer 3 Communications will test Bring Your Own Device (BYOD) authentication and any associated Captive Portal Redirects.

3.4 Post Implementation Support

Layer 3 Communications will provide no-charge telephone support for three business days following successful completion of the deployment. During this time any unforeseen issues will be identified and resolved, including any needed on-site visit. Additionally, during this period Layer 3 Communications will provide basic instruction on the configuration and maintenance of the hardware devices provided.

Layer 3 Communications will:

- Provide no-charge telephone support for three business days following the first deployment
- Provide ongoing support under the terms of our support agreement with the district
- Provide equipment usage and maintenance instruction
 - Implementing Aruba WLAN (IAW) is a prerequisite

3.5 Assumptions and Customer Responsibilities

3.5.1 Assumptions

Layer 3 Communications has made the following assumptions:

- Gregory-Portland ISD will have information systems personnel available to assist Layer 3 Communications with this implementation
- Configuration work will be conducted during normal business hours

3.5.2 Customer Responsibilities

In order for Layer 3 Communications to effectively execute this project, we will require the assistance of Gregory-Portland ISD. These items will be necessary to be made appropriately available prior to an agreed upon implementation date.

Gregory-Portland ISD will be responsible for providing:

- Diagrams and documentation of the network as available
- Current maps of facilities (CAD files preferred)
- Access to network hardware to gather configuration and firmware information
- Access to the required facilities and an escort to any controlled areas
- Administrative access to various hardware components as needed
- Any required passwords, IP addressing schemes, and external server/system information needed for configuration programming.
- Physical access to MDFs, IDF, cabling plant, and other controlled areas as appropriate
- An outage window to perform the installation of the new APs for each site.
- A naming convention for the APs that will be used for labels and for AP names in the controller.
- Gregory-Portland ISD will be responsible for the configuration, maintenance, and support of all systems integrating with the deployed architecture including but not limited to the following: Microsoft AD, Radius/TACACS+, DNS, and DHCP. DHCP scopes and options will need to be provisioned ahead of time before a campus is installed. Additionally Gregory-Portland ISD will be responsible for all switching infrastructure, which the APs connect to unless that is also contracted out to Layer 3 Communications. The switching infrastructure includes proper configuration for VLAN definitions and assignments, PoE, LACP, trunking on uplinks, and any other configuration necessary to allow the deployed architecture to communicate with the G-PISD network.

Assigning the appropriate G-PISD resource to help resolve punch list items in a timely fashion after each campus installation in order to minimize the project timeline.

4 GREGORY-PORTLAND REQUIRED FORMS AND PRICING

Forms and pricing follow this page.

Bid Proposal Form

Gregory-Portland ISD
G-PISD Wireless Infrastructure
608 College St
Portland, TX 78374
361-777-1089 opt. 1

Due Date: December 15, 2017
Due Time: 2:00 PM CST

This bid responds to all specifications as contained in the said notice, except that deviations from said specifications are noted on the attached pages.

Summary Pricing:

Pricing for:

- ☒ Cost of Access Points and licenses at TM Clark Elementary
- ☒ Cost of Access Points and licenses at Stephen F Austin Elementary
- ☒ Cost of Access Points and licenses at WC Andrews Elementary
- ☒ Cost of Access Points and licenses at Gregory-Portland High School
- ☒ Cost of Access Points and licenses at East Cliff Elementary
- ☒ Cost of Access Points and licenses at Gregory-Portland Junior School

\$ 113,932.⁶⁰ Total Implementation Cost (including taxes and fees)

By signing below, I attest that I am authorized representative/agent and that I am authorized by my signature to bind this company contractually.

Billing Terms Net 30 Date 12/12/17

Vendor's Company Name Layer 3 Communications, LLC

Signature 

Name and Title Joe Camareno, Account Manager

Address 4850 Research Drive

City/State/Zip San Antonio, Texas 78240

Telephone (512) 587-0390 Fax ()

Contact Person Joe Camareno

Contact Phone No (512) 587-0390 Fax ()

Reference Request Form

All vendors are required to provide a minimum of three (3) references as part of your bid submittal for similar projects in Texas in the last three (3) years. Failure to provide references will cause your proposal to be rejected as non-responsive.

Name of Firm: CLEAR Creek ISD
Firm Address: 330 South Iowa, League City, 77573
Contact Person with Phone # JASON PIAZZA 281-284-0400
Project Description VARIOUS PROJECTS SINCE 2007,
INCLUDING ARUBA AND JUNIOR DEPLOYMENT.

Name of Firm: Deer Park ISD
Firm Address: 301 WEST P STREET, Deer Park, 77536
Contact Person with Phone # PETE DAVIS 832-668-7452
Project Description VARIOUS PROJECTS INCLUDING ARUBA,
JUNIOR, AND ANAYA PROJECTS

Name of Firm: AMERICAN PAYROLL ASSOCIATION
Firm Address: 660 NORTH MAIN STREET, SA 78205
Contact Person with Phone # CHRISTOPHER TUTTLE 210-226-4600
Project Description JUNIOR AND ARUBA DEPLOYMENT,
FORMER FIREWALL SUPPORT

CONFLICT OF INTEREST QUESTIONNAIRE
For vendor doing business with local governmental entity

FORM CIQ

This questionnaire reflects changes made to the law by H.B. 23, 84th Leg., Regular Session.

This questionnaire is being filed in accordance with Chapter 176, Local Government Code, by a vendor who has a business relationship as defined by Section 176.001(1-a) with a local governmental entity and the vendor meets requirements under Section 176.006(a).

By law this questionnaire must be filed with the records administrator of the local governmental entity not later than the 7th business day after the date the vendor becomes aware of facts that require the statement to be filed. See Section 176.006(a-1), Local Government Code.

A vendor commits an offense if the vendor knowingly violates Section 176.006, Local Government Code. An offense under this section is a misdemeanor.

OFFICE USE ONLY

Date Received

1 Name of vendor who has a business relationship with local governmental entity.

Layer 3 Communications, LLC

2

Check this box if you are filing an update to a previously filed questionnaire. (The law requires that you file an updated completed questionnaire with the appropriate filing authority not later than the 7th business day after the date on which you became aware that the originally filed questionnaire was incomplete or inaccurate.)

3

Name of local government officer about whom the information is being disclosed.

None

Name of Officer

4

Describe each employment or other business relationship with the local government officer, or a family member of the officer, as described by Section 176.003(a)(2)(A). Also describe any family relationship with the local government officer. Complete subparts A and B for each employment or business relationship described. Attach additional pages to this Form CIQ as necessary.

A. Is the local government officer or a family member of the officer receiving or likely to receive taxable income, other than investment income, from the vendor?

☐ Yes

☐ No

B. Is the vendor receiving or likely to receive taxable income, other than investment income, from or at the direction of the local government officer or a family member of the officer AND the taxable income is not received from the local governmental entity?

☐ Yes

☐ No

5

Describe each employment or business relationship that the vendor named in Section 1 maintains with a corporation or other business entity with respect to which the local government officer serves as an officer or director, or holds an ownership interest of one percent or more.

6

☐

Check this box if the vendor has given the local government officer or a family member of the officer one or more gifts as described in Section 176.003(a)(2)(B), excluding gifts described in Section 176.003(a-1).

7

[Signature]
Signature of vendor doing business with the governmental entity

12/12/17
Date

CONFLICT OF INTEREST QUESTIONNAIRE

For vendor doing business with local governmental entity

A complete copy of Chapter 176 of the Local Government Code may be found at <http://www.statutes.legis.state.tx.us/Docs/LG/htm/LG.176.htm>. For easy reference, below are some of the sections cited on this form.

Local Government Code § 176.001(1-a): "Business relationship" means a connection between two or more parties based on commercial activity of one of the parties. The term does not include a connection based on:

- (A) a transaction that is subject to rate or fee regulation by a federal, state, or local governmental entity or an agency of a federal, state, or local governmental entity;
- (B) a transaction conducted at a price and subject to terms available to the public; or
- (C) a purchase or lease of goods or services from a person that is chartered by a state or federal agency and that is subject to regular examination by, and reporting to, that agency.

Local Government Code § 176.003(a)(2)(A) and (B):

- (a) A local government officer shall file a conflicts disclosure statement with respect to a vendor if:

- (2) the vendor:

- (A) has an employment or other business relationship with the local government officer or a family member of the officer that results in the officer or family member receiving taxable income, other than investment income, that exceeds \$2,500 during the 12-month period preceding the date that the officer becomes aware that
 - (i) a contract between the local governmental entity and vendor has been executed; or
 - (ii) the local governmental entity is considering entering into a contract with the vendor;
- (B) has given to the local government officer or a family member of the officer one or more gifts that have an aggregate value of more than \$100 in the 12-month period preceding the date the officer becomes aware that:
 - (i) a contract between the local governmental entity and vendor has been executed; or
 - (ii) the local governmental entity is considering entering into a contract with the vendor.

Local Government Code § 176.006(a) and (a-1)

- (a) A vendor shall file a completed conflict of interest questionnaire if the vendor has a business relationship with a local governmental entity and:

- (1) has an employment or other business relationship with a local government officer of that local governmental entity, or a family member of the officer, described by Section 176.003(a)(2)(A);
- (2) has given a local government officer of that local governmental entity, or a family member of the officer, one or more gifts with the aggregate value specified by Section 176.003(a)(2)(B), excluding any gift described by Section 176.003(a-1); or
- (3) has a family relationship with a local government officer of that local governmental entity.

(a-1) The completed conflict of interest questionnaire must be filed with the appropriate records administrator not later than the seventh business day after the later of:

- (1) the date that the vendor:
 - (A) begins discussions or negotiations to enter into a contract with the local governmental entity; or
 - (B) submits to the local governmental entity an application, response to a request for proposals or bids, correspondence, or another writing related to a potential contract with the local governmental entity; or
- (2) the date the vendor becomes aware:
 - (A) of an employment or other business relationship with a local government officer, or a family member of the officer, described by Subsection (a);
 - (B) that the vendor has given one or more gifts described by Subsection (a); or
 - (C) of a family relationship with a local government officer.

QUESTIONNAIRE SIGNATURE(S)

All portions of this Statement of Qualifications are true and correct. The undersigned is authorized to sign for and legally bind the Respondent.

The undersigned authorizes Gregory-Portland Independent School District and its agents and representatives to contact any firm, organization, or person discussed in this Statement of Qualifications regarding the Respondent's performance, financial condition and other information regarding the Respondent's Capability.



(Signature of Authorized Signing Officer)

(Affix Corporate Seal
If a Corporation)

Joe Camareno

(Printed Name)

Account Manager

(Title)

12/12/17

(Date)

NON-COLLUSION STATEMENT

STATE OF TEXAS §

COUNTY OF Williamson ~~SAN PATRICIO~~ §

BEFORE ME, the undersigned authority, on this day personally appeared Jose Camareno known to me to be the person whose name is subscribed to the following, who, upon oath, says:

I am the manager, secretary or other agent or officer of the principal of the Bidder or Proposer ("Bidder") in the matter of the bids or proposals to which this affidavit is attached, and I have full knowledge of the relations of the Bidder with the other firms in this same line of business, and the Bidder is not a member of any trust, pool, or combination to control the price of supplies, materials and/or services bid on, or to influence any person to propose or not to bid thereon.

I further affirm that the Bidder has not given, offered to give, nor intends to give at any time hereafter any economic opportunity, future employment, gift, loan, gratuity, special discount, trip, favor, or service to a public servant in connection with the submitted bid/proposal.

[Signature]
Affiant (Contractor)

Joe Camareno
Printed Name

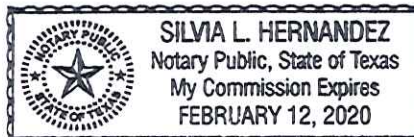
Account Manager
Title

Layer 3 Communications, LLC
Company

Subscribed and sworn to before me,
this, 12th day of December, 2017

[Signature]
Notary Public

My Commission Expires Feb. 12, 2020



Suspension or Debarment Certificate

Non-Federal entities are prohibited from contracting with or making subawards under covered transactions to parties that are suspended or debarred or whose principals are suspended or debarred. Covered transactions include procurement for goods or services equal to or in excess of \$100,000.00. Contractors receiving individual awards for \$100,000.00 or more and all subrecipients must certify that the organization and its principals are not suspended or debarred.

By submitting this offer and signing this certificate, the bidder:

- Certifies that the owner/operator has not been convicted of a felony except as indicated on separate attachment to this offer, in accordance with Section 44.034, Texas Education Code, and
- Certifies that no suspension or disbarment is in place, which would preclude receiving a federally funded contract under the Federal OMB, A-102, Common Rule (_36)

Vendor Name Layer 3 Communications, LLC

Authorized Company Official's Name Joe Camareno

Signature of Company Official  Date 12/12/17

Vendor E-mail Address jcamareno@layer3com.com

Vendor Telephone Number 512-587-0390



4856 Research Drive
San Antonio, TX 78240
Phone: (877) 221-3924
Fax: (866) 535-3925

ATTN: Andrew Guerra
Phone: 3617771089 ext 1
Fax: 3617774264
Email: aguerra@g-pisd.org

Presented to:
Gregory-Portland ISD
611 Buddy Ganem
Portland, Texas 78374

<http://www.g-pisd.org/>
Contract #: DIR-TSO-2679

QUOTATION

Quotation Number: Q-02694
Date: 11/30/2017
VALID TILL 6/15/2018
TERMS: Net 30
FOB : San Antonio, TX
Reference : Per our conversation.
Submitted By : Joe Camareno
jcamareno@layer3com.com

TM Clark Elementary School

Hardware/Licenses

ITEM	PART NUMBER	QTY.	DESCRIPTION	UNIT LIST PRICE	YOUR UNIT COST	YOUR EXTENDED COST
1	JW797A	54	Aruba AP-315 Dual 2x2/4x4 802.11ac AP	\$995.00	\$477.60	\$25,790.40
2	JW619AAE	21	Aruba LIC-K-12 AOS 1 Dev Lic Bndl E-LTU	\$165.00	\$79.20	\$1,663.20
Hardware/Licenses Subtotal:						\$27,453.60

Network Support

ITEM	PART NUMBER	QTY.	DESCRIPTION	UNIT LIST PRICE	YOUR UNIT COST	YOUR EXTENDED COST
3	L3WIR-INST	54	Wireless-Installation - Includes staging, physical installation, patching and testing per design documents (SOW required)	\$65.00	\$65.00	\$3,510.00
Network Support Subtotal:						\$3,510.00

Total Cost : \$30,963.60



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San Antonio, TX 78240
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Fax: (866) 535-3925

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Phone: 3617771089 ext 1
Fax: 3617774264
Email: aguerra@g-pisd.org

Presented to:
Gregory-Portland ISD
611 Buddy Ganem
Portland, Texas 78374

<http://www.g-pisd.org/>
Contract #: DIR-TSO-2679

QUOTATION

Quotation Number: Q-02695
Date: 11/30/2017
VALID TILL 6/15/2018
TERMS: Net 30
FOB : San Antonio, TX
Reference : Per our conversation.
Submitted By : Joe Camareno
jcamareno@layer3com.com

S.F. Austin Elementary School

Hardware/Licenses

ITEM	PART NUMBER	QTY.	DESCRIPTION	UNIT LIST PRICE	YOUR UNIT COST	YOUR EXTENDED COST
1	JW797A	45	Aruba AP-315 Dual 2x2/4x4 802.11ac AP	\$995.00	\$477.60	\$21,492.00
2	JW619AAE	17	Aruba LIC-K-12 AOS 1 Dev Lic Bndl E-LTU	\$165.00	\$79.20	\$1,346.40
Hardware/Licenses Subtotal:						\$22,838.40

Network Support

ITEM	PART NUMBER	QTY.	DESCRIPTION	UNIT LIST PRICE	YOUR UNIT COST	YOUR EXTENDED COST
3	L3WIR-INST	45	Wireless-Installation - Includes staging, physical installation, patching and testing per design documents (SOW required)	\$65.00	\$65.00	\$2,925.00
Network Support Subtotal:						\$2,925.00

Total Cost : \$25,763.40



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San Antonio, TX 78240
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Fax: (866) 535-3925

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Phone: 3617771089 ext 1
Fax: 3617774264
Email: aguerra@g-pisd.org

Presented to:
Gregory-Portland ISD
611 Buddy Ganem
Portland, Texas 78374

<http://www.g-pisd.org/>
Contract #: DIR-TSO-2679

QUOTATION

Quotation Number: Q-02696

Date: 11/30/2017

VALID TILL 6/15/2018

TERMS: Net 30

FOB : San Antonio, TX

Reference : Per our conversation.

Submitted By : Joe Camareno

jcamareno@layer3com.com

East Cliff Elementary School

Hardware/Licenses

ITEM	PART NUMBER	QTY.	DESCRIPTION	UNIT LIST PRICE	YOUR UNIT COST	YOUR EXTENDED COST
1	JW797A	19	Aruba AP-315 Dual 2x2/4x4 802.11ac AP	\$995.00	\$477.60	\$9,074.40
2	JW619AAE	19	Aruba LIC-K-12 AOS 1 Dev Lic Bndl E-LTU	\$165.00	\$79.20	\$1,504.80
Hardware/Licenses Subtotal:						\$10,579.20

Network Support

ITEM	PART NUMBER	QTY.	DESCRIPTION	UNIT LIST PRICE	YOUR UNIT COST	YOUR EXTENDED COST
3	L3WIR-INST	19	Wireless-Installation - Includes staging, physical installation, patching and testing per design documents (SOW required)	\$65.00	\$65.00	\$1,235.00
Network Support Subtotal:						\$1,235.00

Total Cost : \$11,814.20



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San Antonio, TX 78240
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Fax: (866) 535-3925

ATTN: Andrew Guerra
Phone: 3617771089 ext 1
Fax: 3617774264
Email: aguerra@g-pisd.org

Presented to:
Gregory-Portland ISD
611 Buddy Ganem
Portland, Texas 78374

<http://www.g-pisd.org/>
Contract #: DIR-TSO-2679

QUOTATION

Quotation Number: Q-02697
Date: 11/30/2017
VALID TILL 6/15/2018
TERMS: Net 30
FOB : San Antonio, TX
Reference : Per our conversation.
Submitted By : Joe Camareno
jcamareno@layer3com.com

Gregory Portland High School

Hardware/Licenses

ITEM	PART NUMBER	QTY.	DESCRIPTION	UNIT LIST PRICE	YOUR UNIT COST	YOUR EXTENDED COST
1	JW797A	29	Aruba AP-315 Dual 2x2/4x4 802.11ac AP	\$995.00	\$477.60	\$13,850.40
2	JW619AAE	29	Aruba LIC-K-12 AOS 1 Dev Lic Bndl E-LTU	\$165.00	\$79.20	\$2,296.80
Hardware/Licenses Subtotal:						\$16,147.20

Network Support

ITEM	PART NUMBER	QTY.	DESCRIPTION	UNIT LIST PRICE	YOUR UNIT COST	YOUR EXTENDED COST
3	L3WIR-INST	29	Wireless-Installation - Includes staging, physical installation, patching and testing per design documents (SOW required)	\$65.00	\$65.00	\$1,885.00
Network Support Subtotal:						\$1,885.00

Total Cost : \$18,032.20



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San Antonio, TX 78240
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Fax: (866) 535-3925

ATTN: Andrew Guerra
Phone: 3617771089 ext 1
Fax: 3617774264
Email: aguerra@g-pisd.org

Presented to:
Gregory-Portland ISD
611 Buddy Ganem
Portland, Texas 78374

<http://www.g-pisd.org/>
Contract #: DIR-TSO-2679

QUOTATION

Quotation Number: Q-02698

Date: 11/30/2017

VALID TILL 6/15/2018

TERMS: Net 30

FOB : San Antonio, TX

Reference : Per our conversation.

Submitted By : Joe Camareno

jcamareno@layer3com.com

Gregory Portland Junior High School

Hardware/Licenses

ITEM	PART NUMBER	QTY.	DESCRIPTION	UNIT LIST PRICE	YOUR UNIT COST	YOUR EXTENDED COST
1	JW797A	29	Aruba AP-315 Dual 2x2/4x4 802.11ac AP	\$995.00	\$477.60	\$13,850.40
2	JW619AAE	29	Aruba LIC-K-12 AOS 1 Dev Lic Bndl E-LTU	\$165.00	\$79.20	\$2,296.80
Hardware/Licenses Subtotal:						\$16,147.20

Network Support

ITEM	PART NUMBER	QTY.	DESCRIPTION	UNIT LIST PRICE	YOUR UNIT COST	YOUR EXTENDED COST
3	L3WIR-INST	29	Wireless-Installation - Includes staging, physical installation, patching and testing per design documents (SOW required)	\$65.00	\$65.00	\$1,885.00
Network Support Subtotal:						\$1,885.00

Total Cost : \$18,032.20



4856 Research Drive
San Antonio, TX 78240
Phone: (877) 221-3924
Fax: (866) 535-3925

ATTN: Andrew Guerra
Phone: 3617771089 ext 1
Fax: 3617774264
Email: aguerra@g-pisd.org

Presented to:
Gregory-Portland ISD
611 Buddy Ganem
Portland, Texas 78374

<http://www.g-pisd.org/>
Contract #: DIR-TSO-2679

QUOTATION

Quotation Number: Q-02699
Date: 11/30/2017
VALID TILL 6/15/2018
TERMS: Net 30
FOB : San Antonio, TX
Reference : Per our conversation.
Submitted By : Joe Camareno
jcamareno@layer3com.com

W.C. Andrews Elementary School

Hardware/Licenses

ITEM	PART NUMBER	QTY.	DESCRIPTION	UNIT LIST PRICE	YOUR UNIT COST	YOUR EXTENDED COST
1	JW797A	15	Aruba AP-315 Dual 2x2/4x4 802.11ac AP	\$995.00	\$477.60	\$7,164.00
2	JW619AAE	15	Aruba LIC-K-12 AOS 1 Dev Lic Bndl E-LTU	\$165.00	\$79.20	\$1,188.00
Hardware/Licenses Subtotal:						\$8,352.00

Network Support

ITEM	PART NUMBER	QTY.	DESCRIPTION	UNIT LIST PRICE	YOUR UNIT COST	YOUR EXTENDED COST
3	L3WIR-INST	15	Wireless-Installation - Includes staging, physical installation, patching and testing per design documents (SOW required)	\$65.00	\$65.00	\$975.00
Network Support Subtotal:						\$975.00

Total Cost : \$9,327.00



December 12, 2017

This contract acknowledges that Gregory-Portland ISD has selected Layer 3 Communications' proposal for provisioning the goods and/or services outlined in Layer 3 Communications' response to GPISD's RFP for their Wireless infrastructure, E-Rate Funding Year (2017-2018). In addition to the terms specified in the RFP, the procurement of these products will be dependent upon the following conditions:

1. Final approval of next year's fiscal budget
2. Award of associated e-rate funding
3. All e-rate funding will be processed through discounted billing method.
4. Receipt of official Gregory-Portland's ISD purchase order.

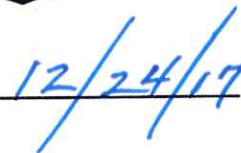
In compliance with e-rate rules, please indicate your agreement to these terms and conditions by completing the acknowledgement below.





Gregory-Portland ISD

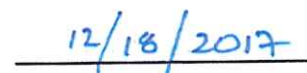
Date


12/24/17



Joe Camareno
Layer 3 Communications, llc

Date


12/18/2017

5 ATTACHMENTS OF PROPOSED PRODUCTS

DATA SHEET

ARUBA 310 SERIES ACCESS POINTS

High-performance 802.11ac Wave 2

The Aruba 310 Series access points deliver high performance and superb user experience for mobile devices, Internet of Things (IoT) devices, and applications in dense office environments. Featuring the 4x4:4SS MU-MIMO capability, advanced Aruba ClientMatch radio management, and Aruba Beacon technologies, the 310 Series enables an all-wireless digital work environment in a cost-effective manner.

With a maximum concurrent data rate of 1,733 Mbps in the 5 GHz band and 400 Mbps in the 2.4 GHz band (for an aggregate peak data rate of 2.1 Gbps), the 310 Series Access Points can quickly add required capacities to your existing or new wireless networks. The mid-range 310 Series, with its single gigabit Ethernet uplink, is ideal for high device density environments, such as schools, retail branches, hotels and enterprise offices, where the organization is cost sensitive.

The high performance and high density 802.11ac 310 Series supports 160 MHz channel bandwidth (VHT160), multi-user MIMO (MU-MIMO) and 4 spatial streams (4SS). It provides simultaneous data transmission to multiple devices, maximizing data throughput and improving network efficiency.

The 310 Series includes the enhanced ClientMatch technology that extends the client steering technology with MU-MIMO client awareness. It automatically identifies MU-MIMO capable mobile devices and steers those devices to the closest MU-MIMO capable Aruba access point. By grouping MU-MIMO capable mobile devices together, the network starts taking advantage of the simultaneous transmission to these devices, increasing its overall capacity. These dynamic roaming policies that are based on device types, help users achieve the best WLAN performance in a mixed device environment during the technology transition period.



The 310 Series also has an integrated Bluetooth Aruba Beacon that simplifies the remote management of a network of large-scale battery-powered Aruba beacons while also providing advanced location and indoor way finding, and proximity-based push notification capabilities. It enables businesses to leverage mobility context to develop applications that will deliver an enhanced user experience and increase the value of the wireless network for organizations.

UNIQUE BENEFITS

- Dual Radio 802.11ac access point with Multi-User MIMO
 - Supports up to 1,733Mbps in the 5GHz band (with 4SS/VHT80 or 2SS/VHT160 clients) and up to 400 Mbps in the 2.4 GHz band (with 2SS/VHT40 clients).
- Built-in Bluetooth Low-Energy (BLE) radio
 - Enables location based services with BLE-enabled mobile devices receiving signals from multiple Aruba Beacons at the same time.
- Advanced Cellular Coexistence (ACC)
 - Minimizes interference from 3G/4G cellular networks, distributed antenna systems, and commercial small cell/femtocell equipment.
- Quality of service for unified communication apps
 - Supports priority handling and policy enforcement for unified communication apps, including Microsoft Skype for Business with encrypted videoconferencing, voice, chat, and desktop sharing.

- RF Management
 - Adaptive Radio Management (ARM) technology automatically assigns channel and power settings, provides airtime fairness, and ensures that APs stay clear of all sources of RF interference to deliver reliable, high-performance WLANs.
 - The Aruba 310 Series Access Points can be configured to provide part-time or dedicated air monitoring for spectrum analysis and wireless intrusion protection, VPN tunnels to extend remote locations to corporate resources, and wireless mesh connections where Ethernet drops are not available.
- Intelligent app visibility and control
 - AppRF technology leverages deep packet inspection to classify and block, prioritize or limit bandwidth for over 1,500 enterprise apps or groups of apps.
- Security
 - Integrated wireless intrusion protection offers threat protection and mitigation, and eliminates the need for separate RF sensors and security appliances.
 - IP reputation and security services identify, classify, and block malicious files, URLs and IPs, providing comprehensive protection against advanced online threats.
 - Integrated Trusted Platform Module (TPM) for secure storage of credentials and keys.
- Intelligent Power Monitoring (IPM):
 - Enables the AP to continuously monitor and report its actual power consumption and optionally make autonomous decisions to disable certain capabilities
 - For the 310 Series Access Points, the IPM power-save feature applies when the unit is powered by an 802.3af PoE source. By default, the USB interface will be the first feature to turn off if AP power consumption will exceed the available power budget. In rare cases it may be necessary to take additional power saving measures, but in most cases, the 310 Series Access Points will operate in unrestricted mode.

CHOOSE YOUR OPERATING MODE

Aruba 310 Series Access Points offer a choice of operating modes to meet your unique management and deployment requirements.

- Controller-managed mode – When managed by Aruba Mobility Controllers, Aruba 310 Series Access Points offer centralized configuration, data encryption, policy enforcement and network services, as well as distributed and centralized traffic forwarding.

- Aruba Instant mode – In Aruba Instant mode, a single AP automatically distributes the network configuration to other Instant APs in the WLAN. Simply power-up one Instant AP, configure it over the air, and plug in the other APs – the entire process takes about five minutes. If WLAN requirements change, a built-in migration path allows 310 Series instant APs to become part of a WLAN that is managed by a Mobility Controller.
- Remote AP (RAP) for branch deployments
- Air monitor (AM) for wireless IDS, rogue detection and containment
- Spectrum analyzer, dedicated or hybrid, for identifying sources of RF interference
- Secure enterprise mesh

For large installations across multiple sites, the Aruba Activate service significantly reduces deployment time by automating device provisioning, firmware upgrades, and inventory management. With Aruba Activate, Instant APs are factory-shipped to any site and configure themselves when powered up.

AP-310 SERIES SPECIFICATIONS

- AP-314 (controller-managed) and IAP-314 (Instant):
 - 802.11ac – 5 GHz 4x4 MIMO (1,733 Mbps max rate) and 2.4 GHz 2x2 MIMO (400 Mbps max rate) radios, with a total of four dual-band RP-SMA connectors for external antennas
- AP-315 (controller-managed) and IAP-315 (Instant):
 - 802.11ac – 5 GHz 4x4 MIMO (1,733 Mbps max rate) and 2.4 GHz 2x2 MIMO (400 Mbps max rate) radios, with a total of four integrated omni-directional downtilt dual-band antennas

WI-FI RADIO SPECIFICATIONS

- AP type: Indoor, dual radio, 5 GHz 802.11ac 4x4 MIMO and 2.4 GHz 802.11n 2x2 MIMO
- Software-configurable dual radio supports 5 GHz (Radio 0) and 2.4 GHz (Radio 1)
- 5 GHz: Four spatial stream Single User (SU) MIMO for up to 1,733 Mbps wireless data rate to individual 4x4 VHT80 or 2x2 VHT160 client devices
- 2.4 GHz: Two spatial stream Single User (SU) MIMO for up to 400 Mbps wireless data rate to individual 2x2 VHT40 client devices (300 Mbps for HT40 802.11n client devices)
- 5 GHz: Four spatial stream Multi User (MU) MIMO for up to 1,733 Mbps wireless data rate to up to three MU-MIMO capable client devices simultaneously

- Support for up to 256 associated client devices per radio, and up to 16 BSSIDs per radio
- Supported frequency bands (country-specific restrictions apply):
 - 2.400 to 2.4835 GHz
 - 5.150 to 5.250 GHz
 - 5.250 to 5.350 GHz
 - 5.470 to 5.725 GHz
 - 5.725 to 5.850 GHz
- Available channels: Dependent on configured regulatory domain.
- Dynamic frequency selection (DFS) optimizes the use of available RF spectrum.
- Supported radio technologies:
 - 802.11b: Direct-sequence spread-spectrum (DSSS)
 - 802.11a/g/n/ac: Orthogonal frequency-division multiplexing (OFDM)
- Supported modulation types:
 - 802.11b: BPSK, QPSK, CCK
 - 802.11a/g/n/ac: BPSK, QPSK, 16-QAM, 64-QAM, 256-QAM
- Transmit power: Configurable in increments of 0.5 dBm
- Maximum (conducted) transmit power (limited by local regulatory requirements):
 - 2.4 GHz band: +18 dBm per chain, +21dBm aggregate (2x2)
 - 5 GHz band: +18 dBm per chain, +24dBm aggregate (4x4)
 - Note: conducted transmit power levels exclude antenna gain. For total (EIRP) transmit power, add antenna gain
- Advanced Cellular Coexistence (ACC) minimizes interference from cellular networks.
- Maximum ratio combining (MRC) for improved receiver performance.
- Cyclic delay/shift diversity (CDD/CSD) for improved downlink RF performance.
- Short guard interval for 20-MHz, 40-MHz, 80-MHz and 160-MHz channels.
- Space-time block coding (STBC) for increased range and improved reception.
- Low-density parity check (LDPC) for high-efficiency error correction and increased throughput.
- Transmit beam-forming (TxBF) for increased signal reliability and range.
- Supported data rates (Mbps):
 - 802.11b: 1, 2, 5.5, 11
 - 802.11a/g: 6, 9, 12, 18, 24, 36, 48, 54
 - 802.11n (2.4GHz): 6.5 to 300 (MCS0 to MCS15)
 - 802.11n (5GHz): 6.5 to 600 (MCS0 to MCS31)
 - 802.11ac: 6.5 to 1,733 (MCS0 to MCS9, NSS = 1 to 4 for VHT20/40/80, NSS = 1 to 2 for VHT160)

- 802.11n high-throughput (HT) support: HT 20/40
- 802.11ac very high throughput (VHT) support: VHT 20/40/80/160
- 802.11n/ac packet aggregation: A-MPDU, A-MSDU

WI-FI ANTENNAS

- AP-314/IAP-314: Four RP-SMA connectors for external dual band antennas. Worst-case internal loss between radio interface and external antenna connectors (due to diplexing circuitry): 0.6dB in 2.4 GHz and 1.2dB in 5 GHz.
- AP-315/IAP-315: Four integrated dual-band downtilt omni-directional antennas for 4x4 MIMO with peak antenna gain of 3.1dBi in 2.4 GHz and 5.0dBi in 5 GHz. Built-in antennas are optimized for horizontal ceiling mounted orientation of the AP. The downtilt angle for maximum gain is roughly 30 degrees.
 - Combining the patterns of each of the antennas of the MIMO radios, the peak gain of the effective per-antenna pattern is 2.6dBi in 2.4 GHz and 3.1dBi in 5 GHz.

OTHER INTERFACES

- One 10/100/1000BASE-T Ethernet network interfaces (RJ-45)
 - Auto-sensing link speed and MDI/MDX
 - 802.3az Energy Efficient Ethernet (EEE)
- USB 2.0 host interface (Type A connector)
- Bluetooth Low Energy (BLE) radio
 - Up to 4dBm transmit power (class 2) and -91dBm receive sensitivity
 - Integrated antenna with roughly 30 degrees downtilt and peak gain of 3.4dBi (AP-314/IAP-314) or 1.5dBi (AP-315/IAP-315)
- Visual indicators (multi-color LEDs): For system and radio status
- Reset button: Factory reset (during device power up)
- Serial console interface (proprietary; optional adapter cable available)
- Kensington security slot

POWER SOURCES AND CONSUMPTION

- The AP supports direct DC power and Power over Ethernet (POE)
- When both power sources are available, DC power takes priority over POE
- Power sources are sold separately
- Direct DC source: 12Vdc nominal, +/- 5%
 - Interface accepts 2.1/5.5-mm center-positive circular plug with 9.5-mm length

- Power over Ethernet (PoE): 48 Vdc (nominal) 802.3af/802.3at compliant source
 - Unrestricted functionality with 802.3at PoE
 - When using IPM, the AP may enter power-save mode with reduced functionality when powered by an 802.3af PoE source (see details on Intelligent Power Monitoring elsewhere in this datasheet)
 - Without IPM, the USB port is disabled and transmit power of the 2.4 GHz radio chains is reduced by 3dB to 15dBm max when the AP is powered by an 802.3af PoE source
- Maximum (worst-case) power consumption: 14.4W (802.3at PoE), 13.6W (802.3af PoE) or 12.7W (DC)
 - Excludes power consumed by external USB device (and internal overhead); this could add up to 6.3W (PoE) or 5.9W (DC) for a 5W/1A USB device
- Maximum (worst-case) power consumption in idle mode: 6.4W (PoE) or 5.9W (DC)

MOUNTING

- The AP ships with two (white) mounting clips to attach to a 9/16-inch or 15/16-inch flat T-bar drop-tile ceiling.
- Several optional mount kits are available to attach the AP to a variety of surfaces; see the Ordering Information section for details.

MECHANICAL

- Dimensions/weight (unit, excluding mount accessories):
 - 182mm (W) x 180mm (D) x 48mm (H)
 - 650g/23oz
- Dimensions/weight (shipping):
 - 223mm (W) x 218mm (D) x 55mm (H)
 - 850g/30oz

ENVIRONMENTAL

- Operating:
 - Temperature: 0° C to +50° C (+32° F to +122° F)
 - Humidity: 5% to 93% non-condensing
- Storage and transportation:
 - Temperature: -40° C to +70° C (-40° F to +158° F)

REGULATORY

- FCC/Industry of Canada
- CE Marked
- R&TTE Directive 1995/5/EC
- Low Voltage Directive 72/23/EEC
- EN 300 328
- EN 301 489
- EN 301 893
- UL/IEC/EN 60950
- EN 60601-1-1, EN60601-1-2

For more country-specific regulatory information and approvals, please see your Aruba representative.

RELIABILITY

MTBF: 916,373 hrs (105yrs) at +25C operating temperature

REGULATORY MODEL NUMBERS

- AP-314 and IAP-314: APIN0314
- AP-315 and IAP-315: APIN0315

CERTIFICATIONS

- CB Scheme Safety, cTUVus
- UL2043 plenum rating
- Wi-Fi Alliance (WFA) certified 802.11a/b/g/n/ac

WARRANTY

- [Aruba limited lifetime warranty](#)

MINIMUM OPERATING SYSTEM SOFTWARE VERSIONS

- ArubaOS 6.5.0.0, 8.0.1.0
- Aruba InstantOS 4.3.0.0

RF PERFORMANCE TABLE

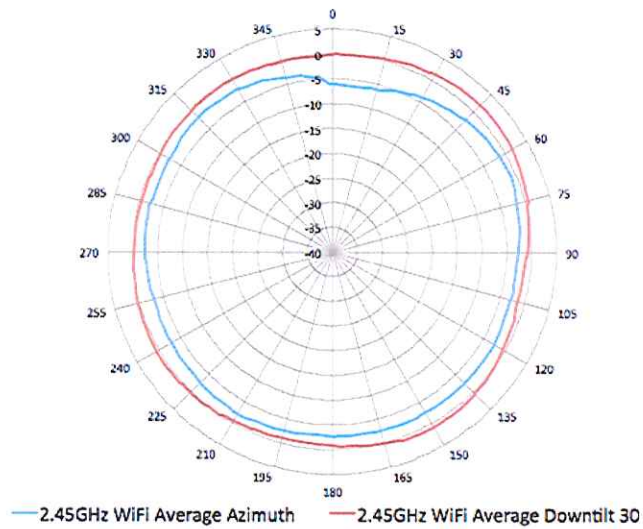
	Maximum transmit power (dBm) per transmit chain	Receiver sensitivity (dBm) per receive chain
802.11b 2.4 GHz		
1 Mbps	18.0	-95.0
11 Mbps	18.0	-88.0
802.11g 2.4 GHz		
6 Mbps	18.0	-91.0
54 Mbps	16.0	-74.0
802.11n HT20 2.4 GHz		
MCS0/8	18.0	-90.0
MCS7/15	14.0	-71.0
802.11n HT40 2.4 GHz		
MCS0/8	18.0	-87.0
MCS7/15	14.0	-68.0
802.11a 5 GHz		
6 Mbps	18.0	-90.0
54 Mbps	16.0	-73.0
802.11n HT20 5 GHz		
MCS0/8/16/24	18.0	-90.0
MCS7/15/23/31	14.0	-71.0
802.11n HT40 5 GHz		
MCS0/8/16/24	18.0	-87.0
MCS7/15/23/31	14.0	-68.0
802.11ac VHT20 5 GHz		
MCS0	18.0	-90.0
MCS9	12.0	-65.0
802.11ac VHT40 5 GHz		
MCS0	18.0	-87.0
MCS9	12.0	-62.0
802.11ac VHT80 5 GHz		
MCS0	18.0	-83.0
MCS9	12.0	-59.0
802.11ac VHT160 5 GHz		
MCS0	18.0	-82.0
MCS9	12.0	-57.0

Maximum capability of the hardware provided (excluding antenna gain). Maximum transmit power is limited by local regulatory settings.

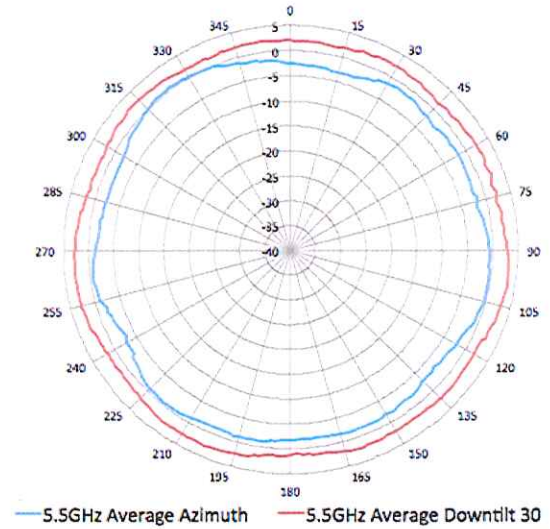
AP-315/IAP-315 ANTENNA PATTERN PLOTS

Horizontal planes (top view, AP facing forward)

Showing azimuth (0 degrees) and 30 degrees downtilt pattern



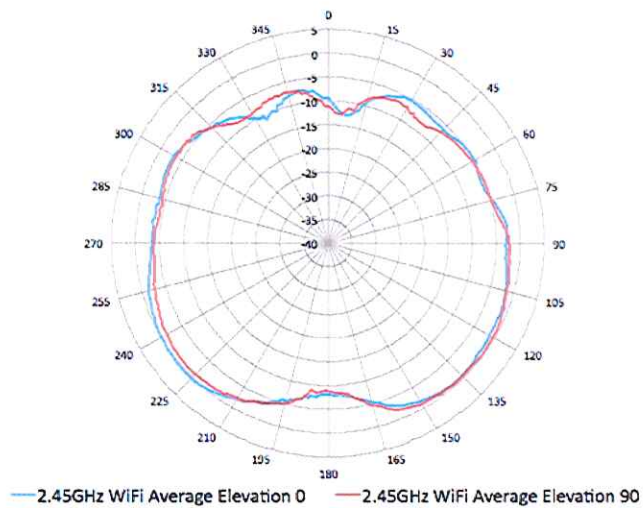
2.45GHz Wi-Fi (antennas 4,5)



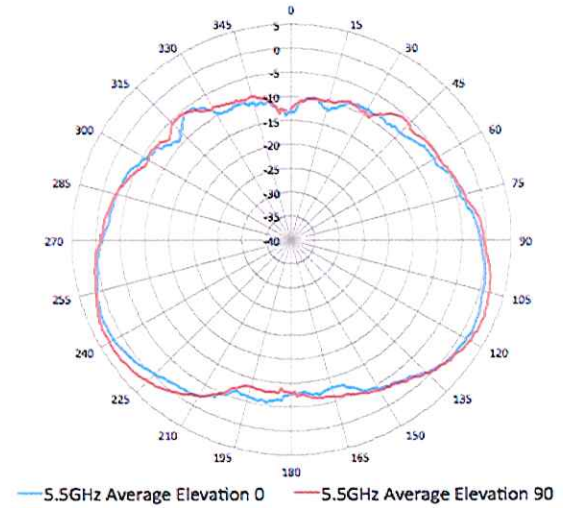
5.5GHz Wi-Fi (antennas 4,5,6,7)

Elevation planes (side view, AP facing down)

Showing side view with AP rotated 0 and 90 degrees



2.45GHz Wi-Fi (antennas 4,5)



5.5GHz Wi-Fi (antennas 4,5,6,7)

ORDERING INFORMATION

Part Number	Description
AP-310 Series Access Points	
JW795A	Aruba AP-314 802.11n/ac 2x2:2/4x4:4 MU-MIMO Dual Radio Antenna Connectors AP
JW797A	Aruba AP-315 802.11n/ac 2x2:2/4x4:4 MU-MIMO Dual Radio Integrated Antenna AP
JW796A	Aruba AP-314 FIPS/TAA-compliant 802.11n/ac Dual 2x2:2/4x4:4 MU-MIMO Dual Radio Antenna Connectors AP
JW798A	Aruba AP-315 FIPS/TAA-compliant 802.11n/ac Dual 2x2:2/4x4:4 MU-MIMO Dual Radio Integrated Antenna AP
JW805A	Aruba Instant IAP-314 (RW) 802.11n/ac Dual 2x2:2/4x4:4 MU-MIMO Radio Antenna Connectors AP
JW807A	Aruba Instant IAP-314 (US) 802.11n/ac Dual 2x2:2/4x4:4 MU-MIMO Radio Antenna Connectors AP
JW804A	Aruba Instant IAP-314 (JP) 802.11n/ac Dual 2x2:2/4x4:4 MU-MIMO Radio Antenna Connectors AP
JW803A	Aruba Instant IAP-314 (IL) 802.11n/ac Dual 2x2:2/4x4:4 MU-MIMO Radio Antenna Connectors AP
JW811A	Aruba Instant IAP-315 (RW) 802.11n/ac Dual 2x2:2/4x4:4 MU-MIMO Radio Integrated Antenna AP
JW813A	Aruba Instant IAP-315 (US) 802.11n/ac Dual 2x2:2/4x4:4 MU-MIMO Radio Integrated Antenna AP
JW810A	Aruba Instant IAP-315 (JP) 802.11n/ac Dual 2x2:2/4x4:4 MU-MIMO Radio Integrated Antenna AP
JW809A	Aruba Instant IAP-315 (IL) 802.11n/ac Dual 2x2:2/4x4:4 MU-MIMO Radio Integrated Antenna AP
JW806A	Aruba Instant IAP-314 (RW) FIPS/TAA 802.11n/ac Dual 2x2:2/4x4:4 MU-MIMO Radio Ant Connectors AP
JW808A	Aruba Instant IAP-314 (US) FIPS/TAA 802.11n/ac Dual 2x2:2/4x4:4 MU-MIMO Radio Ant Connectors AP
JW812A	Aruba Instant IAP-315 (RW) FIPS/TAA 802.11n/ac Dual 2x2:2/4x4:4 MU-MIMO Radio Integrated Ant AP
JW814A	Aruba Instant IAP-315 (US) FIPS/TAA 802.11n/ac Dual 2x2:2/4x4:4 MU-MIMO Radio Integrated Ant AP
Mounting Spares	
JW044A	AP-220-MNT-C1 2x Ceiling Grid Rail Adapter for Basic Flat Rails Mount Kit
Mounting Accessories	
JW045A	AP-220-MNT-C2 2x Ceiling Grid Rail Adapter for Interlude and Silhouette Mt Kit
JX961A	AP-MNT-CM1 Industrial Grade Indoor Access Point Metal Suspended Ceiling Rail Mount Kit
JW046A	AP-220-MNT-W1 Flat Surface Wall/Ceiling Black AP Basic Flat Surface Mount Kit
JW047A	AP-220-MNT-W1W Flat Surface Wall/Ceiling White AP Basic Flat Surface Mount Kit
JY706A	AP-220-MNT-W3 White Low Profile Box Style Secure Large AP Flat Surface Mount Kit
Other Accessories	
JW827A	Aruba 315-CVR-20 20-pk for AP-315 with Holes for LED Indicators White Non-glossy Snap-on Covers

ORDERING INFORMATION

Part Number	Description
Generic Indoor AP Accessories	
JX990A	AP-AC-12V30B 12V/30W AC/DC Desktop Style 2.1/5.5/9.5mm Circular 90 Deg Plug DoE Level VI Adapter
JW627A	PD-3501G-AC 15.4W 802.3af PoE 10/100/1000Base-T Ethernet Midspan Injector
JW629A	PD-9001GR-AC 30W 802.3at PoE+ 10/100/1000 Ethernet Indoor Rated Midspan Injector
Antennas	See info on Aruba website for antenna part numbers
JW071A	AP-CBL-SER AP Proprietary DB9 Female Serial Adapter Cable



www.arubanetworks.com

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