

Guide to Campground and RV Park Wi-Fi Planning



EnGenius®



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Today's modern campers still see camping as a great way to decompress from the stresses of everyday life and to spend more time with family and friends, according to the 2015 North American Camping Report.¹ Yet, among those surveyed, 51% of all campers stated they go online at least once a day while camping, and 41% said that having free Wi-Fi influenced their decision regarding what campground to stay at. In fact, according to the study, free Wi-Fi ranked as the third most important amenity, behind clean bathrooms and kid-friendly environments.

51% of campers go
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Cairn Consulting

Improving the camping experience and offering campers this increasingly important amenity are just a few of the benefits of incorporating reliable Wi-Fi services into your site upgrade plans. As the demand for near continuous Internet connectivity continues to increase, your ability to provide this "must-have" amenity to existing and potential campers will help set your campground or RV park apart from those who do not.



A surprising 2013 study² showed that 69% of employed vacationers planned to bring a work-capable device with them on vacation and 67% of these said they expected to use the device for work-related purposes while vacationing. This is just another example of the growing need for you, as a campground or RV park operator, to consider providing reliable Wi-Fi services to your guests. This guide is designed to help you assess your needs and effectively plan your wireless network.

Free Wi-Fi ranked as the 3rd most important campground amenity, behind clean bathrooms & kid-friendly environments.

The following questions will guide you in assessing your needs in preparation for your wireless network site plan.

1. Where Does the Internet Service Enter Your Property?

When considering Wi-Fi for your staff, campers and RV guests, it is important to understand how you are going to deliver that service. The location of the Internet Service Provider's (ISP) equipment will help you determine what is needed, such as Ethernet cabling, network **Power-over-Ethernet** switches and/or **wireless access points** to deliver that service to your users.

2. How Far Is the Internet Service Entry Point from Your Desired Coverage Area(s)?

Having an understanding of the distance from your ISP's equipment to the service area is important. This will give you a good idea of what equipment is needed, and where it should be located. For example, if your Internet service is coming into the basement of the main office, you may need to run cabling from the entry point to other equipment in order to connect an access point that will provide Internet connectivity to the office, and extend it to other access points throughout the property.

¹2015 North American Camping Report. Conducted by the Cairn Consulting Group. Retrieved from <http://koa.uberflip.com/i/476644-2015-north-american-camping-report>

²Survey conducted in the U.S. by Harris Interactive on behalf of Expedia from June 25-27, 2013. Retrieved from <https://www.teamviewer.com/en/press/teamviewer-survey-employees-planning-to-cope-with-work-during-summer-vacation.aspx>

3. How Much Bandwidth Are You Currently Receiving From Your ISP?

The amount of **bandwidth** you are currently receiving from your ISP will determine the maximum speed you can offer your staff, campers and RV guests. More bandwidth enables more users to connect and allows you to provide higher quality Wi-Fi services. With this in mind, you may need to consider increasing your bandwidth to ensure a positive Wi-Fi experience for all guests.

Not sure how much bandwidth you may need? Visit Bandwidth Pool's, free bandwidth calculator: <http://bandwidthpool.com/bandwidth-calculator/>

4. What Is Your Approximate Average Number of Users?

The average number of users is also known as user capacity, and this helps determine the number of devices that will likely be accessing your wireless network. As a rule of thumb, assume that your network will need to support 2.5 devices per person, including smartphones, tablets, gaming devices or laptops in order to determine the number of access points needed for your site.

5. What "Quality of Service" or Level of Access Would You Like to Provide Your Guests?

Knowing the quality of service that you want to offer to your staff, campers and RV guests will help you determine the best placement for your access points. Common offerings include **hotspot service**, individual campsite/cabin/RV site service and complete park services.

6. What Is the Construction of Your Buildings?

Wireless signals degrade when traveling through different materials. Concrete, wood, metal siding, fiberglass, and/or rebar can result in different levels of Wi-Fi signal degradation. Knowing the construction of your walls, ceilings and floors (in multi-level buildings) will help determine the quantity and appropriate placement of your wireless access points.

7. Do You Currently Have Ethernet Cable Run Out to Each Building or Desired Wi-Fi Location?

Having the proper, shielded Ethernet cable already run to buildings or centralized locations makes the deployment of Wi-Fi very easy. If not, you can simply implement a secure wireless link or **wireless bridge** that will carry the signal to a designated location, avoiding the need for additional cabling, costs and the hassle of permits.

When considering a wireless bridge, use one that supports the same wireless speeds as the rest of your network. The more speed the link provides, the better the experience for the camper.

8. How Many Campsites, Cabins or RV Sites Do You Plan to Provide Wireless Access to?

Knowing the number of campsites, cabins or RV sites you would like to provide Wi-Fi connectivity to will help determine the required quantity and placement of access points and wireless bridges. Knowing this information will also assist in determining the average number of users that will be on your network at any given time.

9. Do You Plan to Implement or Expand an Existing Surveillance System?

Surveillance systems are becoming more commonplace in campground and RV parks. Not only do they provide important, 24/7 visuals on key areas, they also add a level of comfort and security for your staff, campers and RVers, and can provide valuable evidence to protect your property in cases such as liability issues, vandals and theft. When installing an **IP surveillance system**, you will again need to consider your site's available bandwidth.

Ideally, you will want to put your security system on a separate network segment than your user network to divide up the amount of bandwidth/speed being used between each, while also allowing you to allocate limits as needed. Be aware that higher resolution IP cameras will need more bandwidth than lower-resolution IP cameras as they provide sharper details, which are important for applications such as identifying facial features and license plate numbers.

41% of campers said that having free Wi-Fi influenced their decision regarding what campground to stay at.
Cairn Consulting

Definitions:

Wireless Access Point³ (WAP or AP) – A device that is located at the edge of a local area (wired) network (LAN) that transmits and receives data wirelessly to and from wireless client devices such as smartphones, laptops, printers, tablets, other APs and client bridges to facilitate connectivity between these devices and the Internet or a network.

Power-over-Ethernet⁴ (PoE) – A technology for wired Ethernet LANs that allows the electrical current necessary for the operation of each device to be carried by the data cables rather than power cords. The result is lower cost, less downtime, easier maintenance, and greater installation flexibility than with traditional wiring.

Bandwidth⁵ - In computer networks, bandwidth is synonymous with data transfer rate, the amount of data that can be carried from one point to another in a given time period (usually a second).

Hotspot Service – A specific, designated area where an access point provides Wi-Fi service and Internet access. Your guests will need to visit specific locations in order to access your Wi-Fi services. These could include the campground store or office, luxury cabins or outdoor recreational facilities.

Wireless Bridge⁶ – A point-to-point link that consists of two devices wirelessly linked together to enable the connection of different LAN segments enabling separate networks to communicate with one another. These wireless bridges are often placed on each end of the property to be connected and wired into another device such as a network switch, IP camera, and router or access point.

IP Surveillance System⁷ - A digitized and networked version of closed-circuit television (CCTV). In an IP surveillance system, an IP camera records video footage and the resulting content is distributed over an IP (Internet protocol) network.

³Techopedia™ <https://www.techopedia.com/definition>

⁴SearchNetworking, TechTarget <http://searchnetworking.techtarget.com/definition/Power-over-Ethernet>

⁵SearchEnterpriseWAN, TechTarget <http://searchenterprisewan.techtarget.com/definition/bandwidth>

⁶Techopedia™ <https://www.techopedia.com/definition/2328/wireless-bridge>

⁷Whatis.com, TechTarget <http://whatis.techtarget.com/definition/IP-surveillance>



10 Campground Wi-Fi Best Practices

1 Consider Both Coverage & Capacity when Determining the Number of Access Points Needed

It is important to create a balance between Wi-Fi coverage and user capacity when doing your Wi-Fi site planning. Consider that each camper, on average will bring approximately 2.5 mobile devices with them to your campground. These may include smartphones, smart watches, tablets, gaming devices and laptops, so having the right balance of coverage and capacity is critical. Access points must be powerful enough to provide complete coverage, and offer enough bandwidth to handle multiple devices without compromising quality.

2 Supporting Guests' Entertainment Applications with the Latest 11ac Wi-Fi Technology

Providing Wi-Fi access within your campground means your customers will not be paying data charges on their cellular devices, and are more likely to use the wireless network for their entertainment applications. Today's newest smartphones, tablets and laptops now support **dual-band** wireless capabilities. Deploying dual-band access points that operate on both the 2.4 GHz and 5 GHz frequencies provide support for both older and newer wireless devices, and allow the AP to handle more users, while helping to balance/offload higher levels of network traffic through band steering.

High-bandwidth intensive applications such as video and audio streaming services will take up a majority of your bandwidth. Installing access points with the latest, high-speed **802.11ac** technology will provide support for these frequently-used higher bandwidth applications. Utilizing dual-band 11ac access points will greatly improve your campers' experiences, supporting positive online site reviews long after their stay.

802.11ac access points offer faster wireless speeds and greater device capacity than previous wireless standards such as 802.11n. Introduced in 2013, 11ac access points operating at their maximum data rates can reach theoretical speeds that are more than double that of existing 802.11n access points. In addition to the increase in speeds, the biggest benefit of using 11ac technology is its ability to handle the high-density requirements driven by the growing number of mobile devices used per person.

3 Industry Standard Security Measures

Secure and control access to your network by protecting and blocking important business office assets and sensitive guest information located on the network from unauthorized access, while still allowing staff and campers to get connected.

Use only hardware and utility software that adheres to network industry security standards and accepted network security protocols such as Wi-Fi Protected Access Encryption (**WPA Personal & WPA2-Enterprise**) and **802.1X with RADIUS** for user authentication. Wireless standards and protocols protect and encrypt data as it moves across the network ensuring you business and guests' sensitive information stays protected.

Establish a secure network segment that blocks access to administrative computers and servers while allowing campers and staff to access the Internet and other network resources. Create and utilize secure, **virtual LAN** segments and assign them to single or multiple access points while regulating network bandwidth based on the needs of specific virtual network segments, such as surveillance cameras; and isolate campers' devices to keep them secure from other campers' devices while on the network.

4 Utilize Wireless Hardware Specifically Rated for Use in Harsh Outdoor Environments

Access points that are specifically designed for use in outdoor settings have different **Ingress Protection Ratings** (IP Ratings). Typically you will find ratings from IP55 to IP68 for outdoor access points. An IP68-rating is one of the highest IP ratings available for outdoor access points with a waterproof and dustproof casing. Most outdoor-rated access points will perform well in harsh conditions, but APs with stated IP-ratings should be considered when installing wireless in an outdoor application.

5 Provide a Clear Line of Site Between Wireless Hardware

In order to maximize your wireless connections between access points and bridges, it is important to consider your outdoor landscape when planning your Wi-Fi deployment. Wireless signals degrade when they travel through obstacles or are met with interference. Trees, hills, power lines, RVs, bathhouses and neighboring campsites can result in differing levels of Wi-Fi signal degradation, and can even become complete signal barriers. Weather conditions can also be a factor in the environment. Heavy rain and wet pine trees can cause reflection and refraction leading to diminished wireless signals.

Identifying a clear path from one access point to another will ensure wireless signals get delivered to the specified area. If you are planning to deploy your access points in the winter months, you may have an initial clear line of sight, but with the new foliage growth in spring and summer, this could end up blocking that once clear line of sight. Consistently maintaining the foliage to keep a clear line of sight may be required; if this is not possible, consider an alternative site plan.

Understanding the challenges of your outdoor environment will help determine the quantity and appropriate placement of your wireless access points and or wireless bridges. Knowing the approximate coverage area, or the distances from one point to another point where trees are not an obstruction is also beneficial. This will be helpful in determining which product(s) will be powerful enough to best meet these requirements.



⁸Antone Gonsalves, 802.11ac speed gains may drive WLAN architecture changes in Wave 2. Search Networking. TechTarget <http://searchnetworking.techtarget.com/feature/80211ac-speed-gains-may-drive-WLAN-architecture-changes-in-Wave-2>

⁹PC Mag <http://www.pcmag.com/encyclopedia/term/58499/dual-band-router>

¹⁰Whatis.com TechTarget <http://whatistechtarget.com/definition/80211ac>

¹¹Techopedia <https://www.techopedia.com/definition/4166/wi-fi-protected-access-wpa>

¹²Techopedia <https://www.techopedia.com/definition/29074/wi-fi-protected-access-enterprise-wpa-enterprise>

¹³Search Mobile Computing TechTarget <http://searchmobilecomputing.techtarget.com/definition/8021X>

¹⁴Search Networking TechTarget <http://searchnetworking.techtarget.com/definition/virtual-LAN>

¹⁵DSM&T <http://www.dsm&t.com/resources/ip-rating-chart/>

¹⁶Search Mobile Computing TechTarget <http://searchmobilecomputing.techtarget.com/definition/Wi-Fi-range-extender>

¹⁷Webopedia http://www.webopedia.com/TERM/W/wireless_bridge.html

802.11ac Wave 1 or Wave 2?

Wave 1 access points make up the majority of available 802.11ac access points currently on the market and provide a marked increase in speed and capacity handling than previous technology. Wave 1 APs generally will not require IT administrators to make widespread network infrastructure changes, making network planning fairly straight forward. Yet, due to Wave 2's additional features, network design adjustments may be needed⁸. The theoretical speeds of Wave 2 will reach up to 7 Gbps, though with the limited number of Wave 2 access points available on the market, pricing will remain at a premium for some time.

Definitions:

Dual-Band – An 802.11 (Wi-Fi) access point that uses the 2.4 and 5 GHz bands, simultaneously supporting the new 802.11ac standard and previous 802.11 standards on the same device. Dual-Band access points can provide load balancing⁹; for example new, 11ac-capable laptops, iPhones[®] and tablets can receive on the 5 GHz band, while older, 11n/a/b/g/n-capable devices can simultaneously receive on the 2.4 GHz band.

802.11ac¹⁰ – Also known as Gigabit Wi-Fi, 802.11ac is a specification applicable to wireless local area networks (WLANs). It operates in the 5 GHz band and facilitates simultaneous streaming of high-definition (HD) video to multiple clients in homes and businesses, as well as faster wireless synchronization and backup of large files.

WPA Personal¹¹ – Short for Wi-Fi Protected Access, WPA is a security standard to secure computers connected to a Wi-Fi network. WPA and WPA2 are concurrent security standards. WPA addresses the majority of the IEEE 802.11i standard; and the WPA2 certification achieved full compliance. However, WPA2 will not work with some older network cards, thus the need for concurrent security standards.

WPA2-Enterprise¹² – Wi-Fi Protected Access-Enterprise (WPA-Enterprise) is a wireless security mechanism designed for small to large enterprise wireless networks. It is an enhancement to the WPA security protocol with advanced authentication and encryption. WPA-Enterprise uses the Remote Authentication Dial-in User Service (RADIUS) protocol to manage user authentication.

802.1X with RADIUS¹³ – The 802.1X standard is designed to enhance the security of wireless local area networks (WLANs) that follow the IEEE 802.11 standard. 802.1X provides an authentication framework for wireless LANs, allowing a user to be authenticated by a central authority.

Virtual LAN¹⁴ – A local area network, or LAN, provides the nodes connected to it with direct access to one another. VLANs allow network administrators to partition their network to match the functional and security requirements of their systems without having to run new cables or make major changes in their current infrastructure.

Ingress Protection Ratings¹⁵ – A two-digit number established by the International Technical Commission, is used to provide an Ingress Protection rating to electronic equipment or to an enclosure for electronic equipment. The first digit following "IP" indicates the level of protection against ingress of solid objects. The second digit indicates the level of protection against ingress of liquids, the higher the numbers, the greater the protection against both types of ingress into the enclosure.

Wireless Repeater or Wireless Range Extender¹⁶ – Is a type of wireless repeater used to expand the reach of a wireless LAN. The device is situated in between a base router or access point and a client that is not close enough to receive acceptable service or one that is on the other side of a barrier.

Wireless Client Bridge¹⁷ – The hardware component that is used to connect two or more network segments which are physically separated.

6 Utilize Wireless Bridges Instead of Wireless Repeaters to Extend the Network

Wireless repeaters or **wireless range extenders** may seem convenient, but they can be challenging to run and in reality, they cut the available wireless speed in half every time the signal is rebroadcasted. This ultimately slows your network performance and will likely leave your campers frustrated. Instead of repeating the signal, a better option to extend the wireless network signal is to implement a secure wireless link using two wireless bridges. This method of carrying the signal to a designated location avoids major speed loss and frees up the access point to exclusively send and receive data to and from client devices.

7 Offer Wireless Adapters for Laptops to Improve RV Owner's Wireless Experience and Potentially Add Revenue

The metal and fiberglass construction of RV campers can block or weaken the Wi-Fi signal potentially resulting in an overall bad customer experience. In addition, the Wi-Fi technology built into some laptops can be older Wi-Fi technology or a weak or non-existent Wi-Fi adapter signal that contributes to connectivity issues. Campground and RV park owners can offer newer technology via a high-powered wireless USB adapter or a wireless Ethernet bridge that plugs into the laptop to pull the signal and direct it to the RV user, improving connectivity. This creates a stronger, faster wireless connection to the deployed access point nearest the RV, leading to a significantly improved wireless experience.

Wireless USB adapters are small, portable and can be used at any campground or RV park that offers Wi-Fi, making these devices versatile and highly desirable to the end user. By providing wireless USB adapters to campers, site operators can create a new revenue stream through the sale or rental of adapters, while greatly improving the RVer's experience and enhancing their customer service.

8 Plan for Power

Underpowered access points or brownouts can cause intermittent connection problems such as rebooting or disconnections. It is recommended that you consult with a local electrician to install weatherproof electrical boxes in the areas where you will be deploying access points and/or other devices that need power, if they are not already in place. An electrician can determine the appropriate solution for supplying the right amount of power, equipment, grounding and surge protection to each location. Be sure to consider any future expansion plans and have the electrician quote or build out to those areas as well.

Powering up IP cameras and/or access points using Power-over-Ethernet (PoE) is highly recommended. PoE adapters and switches deliver data and power simultaneously to these PoE-capable devices and can save money and time by eliminating extra cable runs and power installations. Additionally, using PoE allows device installation in areas where there is no power source to plug into such as on light poles or rooftops. There are many PoE options available to meet varying needs like single-port PoE injectors and adapters or 8-port to 48-port PoE switches that can supply PoE to one device or many.

9 Mounting Height, Type & Surfaces

Most outdoor access points and wireless bridges include pole- or wall-mounting hardware. These devices can be mounted on existing light poles, galvanized poles or outbuildings. Access points need to be mounted at a height that makes their signals accessible to a majority of your users. Typically, the higher an AP is mounted the better. Access points deployed near RVs, should be installed an estimated 12 feet above the standard RV roofline. Remember, wireless bridges connecting to other wireless bridges are communicating at farther distances and need a clear line of sight to ensure the best performance, so the higher the mounting point the better.

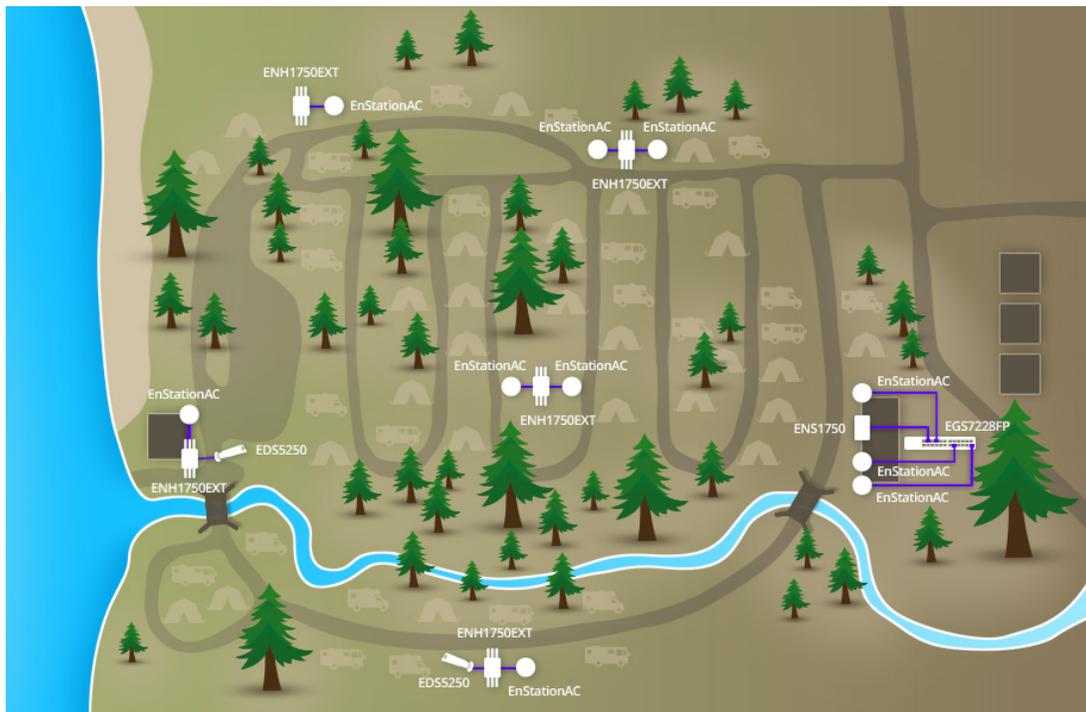
10 Consult with Experts for Site Surveys and Network Designs

Outdoor Wi-Fi network design can be complicated due to its high-density needs and varying outdoor considerations. Be sure to work with wireless experts to perform a campground site survey. A qualified expert will ask a series of questions designed to gain a deeper understanding of your existing network and any issues you currently have, as well as any future technology, building or coverage area expansion plans you may have.

Once your survey is complete, a network design and deployment plan will spell out the hardware needs and deployment locations for access points and other hardware in order to achieve the best wireless coverage and network connectivity available.



Sample Single Campground Deployment Design



Sample Bill of Materials

Table 1 shows the recommended Bill of Materials (BoM) for this design. Please verify actual pricing, as there are often applicable discounts, promotional offers, and/or bundled kits when purchasing quantity.

| EnGenius PN | Description | Quantity |
|--------------------|---|----------|
| EGS7228FP | 24-Port 1U Rack-Mount Gigabit Ethernet Layer 2 PoE+ Switch w/4 Dual-Speed SFP Fiber Uplink Ports. Supports 802.3at/af PoE, supplying up to 30 watts per port for a total PoE budget of 370 watts. | 1 |
| ENS1750 | 802.11a/b/g/n/ac 1,750 Mbps (450 Mbps 2.4 GHz + 1,300 Mbps 5 GHz) Outdoor High-Power 500mW Access Point/Bridge. Integrated Omni-directional high-gain 5dBi antenna for both bands. Features 8 SSID, IP55-rated waterproof enclosure, WPA2/WPA/WEP encryption, Gigabit Ethernet ports & signal strength LED indicators. Accessory kit, PoE injector & pole mount strap. | 1 |
| ENH1750EXT | 802.11a/b/g/n/ac Outdoor High-Powered Ruggedized IP68-rated Waterproof Enclosure, 3x3:3 Dual-Band Wireless Access Point. Features mesh & WDS, with speeds to 1,300 Mbps (5 GHz) to 450 Mbps (2.4 GHz), 3x 5dBi (2.4 GHz) & 3x 7dBi (5 GHz) Omni-directional antennas, accessory kit, PoE (48V) injector, wall-mount kit & pole-mount bracket. | 5 |
| EnStationAC | 802.11ac 867 Mbps Outdoor High-Power 400mW Access Point/Bridge. Features multiple SSID, IP55-rated waterproof enclosure, WPA2/WPA/WEP encryption, signal strength LED indicators, internal high-gain directional antenna (19dBi), PoE 802.3at-compliant, includes a secondary Gigabit PoE-802.3af-compliant port for extending power to compliant devices such as IP surveillance cameras & pole-mount strap. | 10 |
| EDS5250 | 2-MP Indoor/Outdoor Day/Night Bullet IP Surveillance Camera featuring PoE, remote viewing & 1080P high-definition dual-stream video to 30 fps. Includes 16-Channel Video Management Software for quick interaction with the camera's scheduling and recording features. | 1 |

Sample Deployment Notes

Part number **EGS7228FP**, a PoE Switch, will be connected to the existing ISP's equipment located in the main building to distribute Internet services and provide power to all or most of the connected devices. Part numbers **ENH1750EXT** and **ENS1750** units will be programmed in wireless access point mode to offer Wi-Fi to staff, campers and RVers. One ENS1750 unit will be programmed in wireless access point mode and mounted to the main building to provide wireless Internet access in the surrounding area.

Part number **EnStationAC** will be programmed as a wireless bridge to be utilized point-to-point to extend the ENH1750EXT Access Points out to the remote areas of the campground without running cabling, thus avoiding extra costs and permits. The primary EnStationAC wireless bridge, located at the main building, will be connected to the EGS7228FP PoE Switch. This will send Internet services out to these remote locations. At each ENH1750EXT Access Point, a remote EnStationAC wireless bridge will connect back to the primary EnStationAC units to provide a wireless pipeline back to the main building.

Five ENH1750EXT units will be programmed in wireless access point mode and mounted in various remote locations throughout the campground to provide wireless access to the Internet in those surrounding areas.

Two **EDS5250** Cameras will be connected to the second port of two ENH1750EXT Access Points. The EDS5250 Camera will utilize the ENH1750EXT Access Point's secondary PoE pass-through port for a power source and to pass data. The EDS5250 Camera will use existing wireless bridges to send data back to the main building.

Note: The number of ENH1750EXT or ENS1750 Access Points may need to increase in order to effectively cover the average amount of users.

About EnGenius Technologies

Established in 1999, EnGenius Technologies, Inc. headquartered in Costa Mesa, California, is an industry expert in wireless communications and RF technology. The company delivers feature-rich, long-range, business-class wireless communications technology for voice and data. The versatility and performance of the company's solutions lower total cost of ownership, increase productivity and maximize return on investment.

Why EnGenius?

- > Award-Winning Industry Expert
- > Ranked Among Top 3 Providers of Wireless Access Points in North America¹⁸
- > Comprehensive Line of Business-Class Solutions
- > Reliable, High-Quality Hardware & Free Utility Software
- > Best Price/Performance Value in the Industry
- > Lower Total Cost of Ownership & Maximum Return on Investment
- > No Annual License or Subscription Fees
- > Free System Design Services & Technical Support

Ready for a Campground Site Design?

EnGenius' Free Design Services Include:

- Wireless Expert Consultation
- Field Applications Engineer Consultation
- Free Site Design
 - Design Layout
 - Recommended Bill of Materials
 - Device Configuration Recommendations
 - Predictive Modeling

Click the button to get started

Want to Learn More about Deploying Wi-Fi in Outdoor Environments?

Watch the EnGenius' TechTalk Video

Have Questions? Need More Info?

We're Here to Help. Call: 888-735-7888. Email: partners@engeniustech.com

Visit: www.engeniustech.com

"By combining two different EnGenius appliances, we were able to eliminate the need and cost of burying cable, while creating a reliable guest network that was both fast and available anywhere on the grounds."

**Chris Trombley, President
Cepstrum Technologies, Inc.
Watertown, NY**

"Through my research, I found a wooded RV park that had deployed the EnGenius products and stated they haven't found anything better for penetration strength. The EnGenius products are by far the most powerful and the best-fit device that I've been able to find, even when compared to Colubris, Meraki and certain Cisco devices."

**Keith Maxwell, IT Consultant for
Anaheim RV Village
Anaheim, CA**

Try the EnStationAC Kit

50% OFF MSRP Demo Program!

For a Limited Time, Try **two** 11AC Wireless Outdoor Bridges & Connect Your Campground/RV Park Long-Range at Blazing Fast 11AC Speeds

¹⁸2014 Stand-Alone Access Point Shipments as reported by The NPD Group.

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