Siklu

Gigabit-Speeds While on Vacation

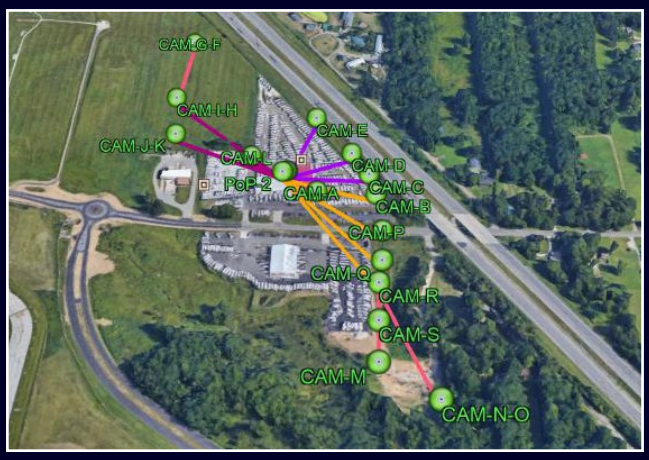
Connectivity for RV Parks and Campgrounds

The COVID pandemic has spurred a great interest in getting away from it all in the great outdoors and RV parks and campgrounds are benefitting significantly.

Some estimates show the industry growing **72%** in recent years, with the “millennials” population segment leading the way. Other positive signs for the industry include: the number of RV dealerships now exceeds **2200** in the U.S., there are more than **13,000** campsites in the U.S. and Canada, **79 million** people are estimated to have visited RV parks and campsites in **2019 – 2020**. This is the foundation of why the overall “market worth” of the industry exceeds **$100 billion**, which includes **600,000** total jobs.

The Dealer

There are multiple applications in the RV amd campground world that can benefit from the ease and speed of gigabit wireless networks. If we start at the beginning, the RV Dealers themselves where people often take the first step in camping – either purchasing or renting and RV, we see large dealer lots with dozens if not hundreds of RVs. These RV’s are worth much more than an average car, starting at **$30k** on average and going as high as **$300k**. This valuable inventory sits outside and needs security. For tehse large lots using Siklus mmWave solutions RV Dealers can deploy cameras across large areas with no need for fiber or cabling outside of basic power.



Roughing it

The days of truly “roughing it” are gone for most people and many have come to expect the conveniences of daily life at these locations, such as, hot running water, shower and toilet facilities and – of course – high-speed Internet. Realizing that cellular network signals are weak in these woodsy or up-in-the-mountains area, many campsites and RV parks have addressed this issue by installing Wi-Fi networks. Still, Wi-Fi networks need a “big pipe” to connect them to a metropolitan WAN (aka, the “outside world”) and what is the best way to do that?

Needless to say the nearest fiber optic POP or even a DSLAM is probably miles (and miles) away in the vast majority of instances and running a “landline” from one of them to the campsite or RV park would be tremendously expensive. Over the years wireless technology has always come to the rescue in these situations. There are now more options than ever, but as described below, high-band mmWave wireless networks offer considerable benefits and are rapidly gaining ground in this market segment.

The limitations of cellular have been noted and many service provides have deployed equipment operating in the **5 GHz** band for wireless connectivity in urban, suburban and rural areas. If you are using 5GHz for the WiFi APs, you can’t use it to also connect the APs as there will be massive interference.

The solution, therefore, lies in another license-exempt band – one with virtually zero interference and plenty of available spectrum – and that is the **60 GHz** band. Campsites and RV parks are deploying WiFi Hotspots throughout their facilities and their visitors can now use their phones, tablets, and PCs just as they would at home.

These hotspots based on 802.11ac are capable of delivering **1 Gbps** to the end users. But this means they also need a multi-Gigabit backhaul connection to support those speeds.

60 GHz is an attractive option because there is **14 GHz** of available spectrum in the US and almost everywhere around the globe. For this reason, the quickest way to establish a Gigabit or multi-Gigabit wireless connection to the APs in a campground or RV park is to use **60 GHz**. Further, because of the very nature of the **60 GHz** signals and the way they are deployed, interference will not be a problem now or in the future.

For these reasons, it is also a way of “future proofing” a network to meet growing end user demand or offer new applications. A new application could be the installation of video security cameras to the network, an application that can require has much as **50Mbps** per camera. This can easily be supported with a mmWave wireless network.

In some instances higher throughput is required and point to point E Band **(70/80GHz)** systems can be used delivering up to **10Gbps** of capacity.

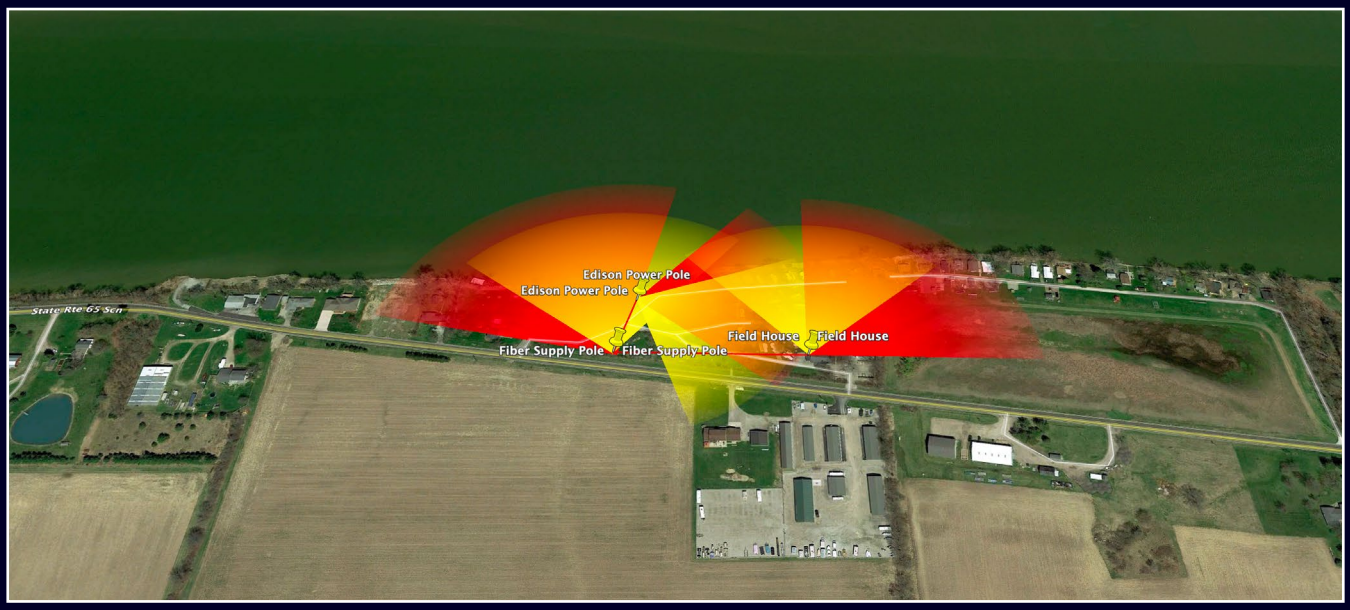


Figure 1 Caption: Typical campsite or RV park Wi-Fi deployment.

Many campgrounds have heavy foliage and Siklu performs well in these locations as narrow beams are an inherent part of high-band mmWave and can "shoot" under the foliage, which greatly facilitates the design and installation and meet the line of sight requirements.

With a variety of mmWave products in both point-to-point and point-to-multipoint configurations and supporting from **1 to 10Gbps** Full Duplex, Siklu has a broad product portfolio to meet virtually any campground or RV park configuration.

hello@siklu.com | www.siklu.com