Anywhere
INTELLIGENT CONNECTIVITY

Smart Wireless Network vs. 4G
Network Infrastructure

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Smart Wireless Network vs. 4G for Connectivity

Today, millions of Internet-of-Things (IoT) devices require constant network connectivity. These devices range from network surveillance cameras and access control devices to air quality and noise pollution monitors, smoke detectors, network audio speakers, and much more. With this increasing demand on the critical IT infrastructure, how can we assure the reliability of the network to maintain 24/7 connectivity with all these cameras and other IoT devices?

4G Technology

4G technology is often readily available thanks to our local telecommunication providers. We use it for on our phones and tablets, so a similar setup of some network cameras running on a 4G router and a SIM card from the telco company sounds like a quick and easy installation. However, the high data requirements for video surveillance streaming, smart camera applications, and IoT connectivity, is **more costly, less secure, and is governed by bandwidth limitations**.

The Cost

The 4G connectivity is essentially an OPEX-based model with a fairly low CAPEX. But the total cost of ownership (TCO) becomes substantial over time and continues to increase.

The Bandwidth

The data throughput is another major disadvantage. Most of the time we use 4G to download data when reading emails, browse the web, or reading LinkedIn posts.

4G is designed for downstream use, as that is what the major use is. This is the opposite of what IoT devices and network cameras require when streaming video and other data for real-time viewing, alerting and recording.

Smart cameras streaming data for License Plate Recognition (LPR), intrusion detection, as well as other detection devices all require a stable uplink bandwidth and are ill-suited on a 4G network.

DID YOU KNOW

Not even the Telco companies want to use their own 4G network for video surveillance or other high-bandwidth application

The biggest challenges with a 4G network for such **uplink** connectivity are 1) limited bandwidth per device of about 2-10 Mbps, 2) unpredictable nature where each link is capped and arranged according to priority, and 3) limited total amount of data upload per week or month.

Let us dissect: For a normal 4G data plan with a 5 GB data limit per month only allows for 16 kbps per device. On the other hand, with an unlimited data rate in the 4G plan, a video surveillance camera using 1.5 Mbps in average will upload 490 GB of video data. Every month!

As a consequence, applications with a constant use of data, such as video streaming, are ranked lowest in priority in a 4G network, making the allocated bandwidth even more unpredictable.

Connecting multiple cameras and IoT devices to the same 4G cell will cause the uplink bandwidth performance to drop dramatically. This renders the network with heavy data congestion, high latency issues, or even network disconnection.

Cybersecurity

With all the cybersecurity threats today, there is no guarantee for data on a local telco network to not be compromised. This possess a huge risk to companies most sensitive data to be compromised when transmitted over a public 4G network.

Smart Wireless Network

A better solution to provide a more cost efficient, unlimited bandwidth, and secure connectivity is a Smart Wireless Network. It consists of several radio nodes forming a web of connectivity throughout the area. It is designed for the highest demands in the most challenging outdoor environments, connecting smart and safe cities, whole rural provinces, industrial complexes, airports, mining camps and construction sites.

The Cost

DID YOU KNOW

The ROI is 5 months comparing Smart Wireless Network and 4G for connectivity

A Smart Wireless Network is more **cost-efficient** compared to 4G. With its pure CAPEX model, the **ROI** (Return of Investment) compared to a 4G network is **5 months**!   No hidden license fees or costs!

The Bandwidth

The Smart Wireless Network supports **up to 1,000 Mbps network-wide** bandwidth. It is designed for demanding enterprise use and operates in **any weather condition**, has **built-in redundancy protocols**, **mesh network planning** and **self-healing connectivity properties**. It is the Tier-1 choice for optimizing network scalability for critical IT infrastructure. There is no better choice for demanding video surveillance or smart cameras requiring predictable, low-latency and high bandwidth use, than the **Smart Wireless Network**. It is designed to meet peak-hour usage as well as less demanding applications, such as smart camera systems or IoT devices, otherwise resulting to data bottlenecked in 4G networks.

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Cybersecurity

Data is always **fully encrypted to the highest level** in a Smart Wireless Network. And as the network infrastructure is in the hands of the end-user there is no risk of being compromised. Chose a Smart Wireless Network when cybersecurity is taken seriously!

Conclusion

A Smart Wireless Network is both more cost-efficient than a 4G connectivity and better suited for the video surveillance, IoT, and smart camera applications. Its flexible design is ideal to start small and grow overtime, as well as fast installations for large-scale solutions.

With a 5-month ROI over 4G a Smart Wireless Network from Anywhere Networks is the connectivity of choice for any demanding, enterprise-grade application.

Anywhere Networks Smart Wireless Network is an easy-to-install wireless infrastructure solution for reliable connectivity with end-to-end security protection and stable data rates, in both urban and rural environments. Our Smart Wireless Network is ideal for both a small-scale system of only a few connection points, up to a large-scale system with hundreds of nodes covering hundreds of kilometres. The Smart Wireless Network from Anywhere Networks connects video surveillance systems, smart video solutions, network audio systems, IoT devices, and any other IT systems.

**It is not just your wireless connection – it is a Smart Wireless Network
from Anywhere Networks!**

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