

CASE STUDY

Sunburn Music Festival

About the Festival

The Sunburn Festival is a commercial electronic dance music festival that takes place in India every year. The event expanded to rank third among all dance festivals worldwide. The Sunburn Festival is a three to five-day festival and features multiple stages with a variety of performers simultaneously.

The festival made a comeback to Vagator, Goa, in 2019. Sunburn was "as big as Tomorrowland and Ultra" according to a 2014 International Music Summit report. It was even listed as one of the Top 10 Festivals in the world by CNN in 2009. On December 28-30th, 2022, the festival the festival completed its 16th stage



THE PROBLEM

Sunburn Festival was previously using Ubiquiti's UniFi LR access points, but they experienced several technical problems. One being, that it did not support Wi-Fi 6 features such as improved MU-MIMO and OFDMA. The UniFi AP's Wi-Fi 5 (802.11ac) networks did not perform well in congested and urban areas where the festival is held. There were multiple Wi-Fi networks running close together at the Sunburn Festival and all of them were using the same Wi-Fi channels, which caused signal interference. As a result, the Wi-Fi signal was reduced or disrupted, resulting in sluggish and unstable connections.

High user density in a congested area during the Sunburn Festival caused the Wi-Fi network's capacity to be exceeded. At this festival, there are both user and staff devices trying to access the network at once which caused congestion, and slowed down the network's performance and increases latency. The previous UniFi solution had a low number of devices that the access points could effectively manage, which caused the performance of all users to suffer from a weak signal.

Only 250 users can be supported by the UniFi Wifi 5 AP, which is insufficient for the festival's needs. Lastly, one of the major concerns was the UniFi LR (Wi-Fi5) did not support the most recent Wi-Fi technologies, which caused the entire network to be relatively slow when connecting the devices to the network.



Provided By Gigatel Networks

Gigatel Networks is Delhi's most proactive Internet Service Provider with an enviable presence in the state. The mission of Gigatel Networks is to provide a wide range of fiber optic internet services to clients, ranging from individuals to big organizations, by deploying the latest technology in an economical manner, to facilitate their day-to-day work and boost their business. across the covered areas.

THE NEED

Sunburn Festival takes place over three to five days throughout the end-of-year holiday season and includes top DJ's and EDM musicians. The festival is a favorite among music lovers and partygoers because it provides a colorful atmosphere with music, dance, art installations, and numerous activities. This festival is attended by over 3 million people annually and has 15000-20,000 concurrent Wi-Fi users.

Due to the large number of devices seeking to connect to the same network in busy areas like concerts and festivals, Wi-Fi connectivity problems are frequent. The Sunburn Music Festival faced slow internet speeds and needed to increase bandwidth across their Wi-Fi networks and provide faster internet speeds in an urban area.

With the amount of Bluetooth devices and multiple Wi-Fi networks, there was an overload of interference in the congested areas and signal deterioration was a frequent issue. Many users at the festival are streaming on their devices and need a solution to provide a strong internet connection. Therefore, the festival required a solution to increase the number of users allowed on an access point to prevent disconnection and troubleshooting issues.

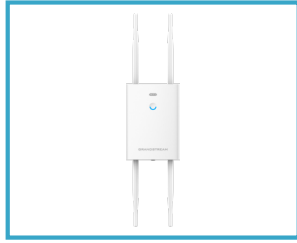


GRANDSTREAM
CONNECTING THE WORLD

COMPETITORS CONSIDERED

The service provider Gigatel Networks, considered Ubiquity Unify and Netgear's AP along with Grandstream's Solutions, however, decided to go ahead with Grandstream's solutions as they could provide updated Wi-Fi 6 AP's with the coverage that the festival required and included a free management option. Additionally, Grandstream had a full stock and better prices compared to Unifi

PRODUCTS DEPLOYED



GWN7664LR Wi-Fi
Enterprise Grade AP



GWN.Cloud
Management Platform
Access Point Management

WHY GRANDSTREAM?

The Sunburn music Festival installed Grandstreams GWN7664LR access point which satisfied all of their Wi-Fi6 needs. With a robust, heat and weather-resistant shell that can operate in temperatures between -30°C and 60°C (-22°F and 140°F) and non-condensing humidity levels between 10% and 90%, the GWN7664LR made for a perfect outdoor solution.

In order to implement a dual-band 4X4:4 multi-user MIMO that maximizes throughput and the number of users connected at once, the GWN7664LR has four extended antennas. To enable multiple devices to connect at faster data rates, the device features four transceivers (one for each antenna), and four spatial streams. The GWN7664LR helps provide further coverage to meet the demands of the users at the festival.

With a range of 300 meters, each GWN7664LR can provide an aggregate wireless throughput of more than 3.5 Gbps to more than 750 continuously connected Wi-Fi clients. In an open location with no obstructions, a single access point could theoretically reach more than 60 acres.

Although the above-mentioned advantages of these access points are significant, their ability to be managed as a component of a larger network using a wireless controller was the main selling point for the Sunburn Festival. GWN.Cloud provides a remote managed solution with more flexibility for the management team to ensure all devices are working. If there were any interruptions in the network, they were able to solve them in a matter of a couple of seconds.

THE RESULT

This is the first time in years that a Wi-Fi solution has been installed at the Sunburn Festival in which the service providers have not received any calls during the event to fix issues. Grandstream's reliable solution was helpful because it provided a smooth installation process for the service provider. The GWN seamless solution also allowed the onsite management team to connect to the Wi-Fi access points using the GWN.Cloud within seconds. This solution was a great option for the festival's Wi-Fi deployment due to products being in stock, providing a simple deployment, free controller, and overall cost-effectiveness of the solution.

The total cost of the infrastructure was also reduced because there wasn't a necessary need to run networking infrastructure for every AP. Due to the GWN7664LR's high bandwidth capabilities (up to 3.55Gbps) and Gigabit network ports, Gigatel Network was able to modify the deployment to fit multiple users in the large outdoor area of the Sunburn Festival. The flexibility to throttle the network on a per-client basis provided everyone at the Sunburn Festival top-tier service despite the large attendance. Additionally, Grandstream's free Cloud management option provided a quick and simple configuration of the GWN Wi-Fi access points as well as ongoing remote monitoring and troubleshooting. The GWN7664LR Wi-Fi access points were the right choice for Sunburn Festival since they allowed them to operate at a cheaper cost while still offering outstanding coverage.