The Formula 1 Brazilian Grand Prix Gets Up to Speed with Wi-Fi 6 Connectivity
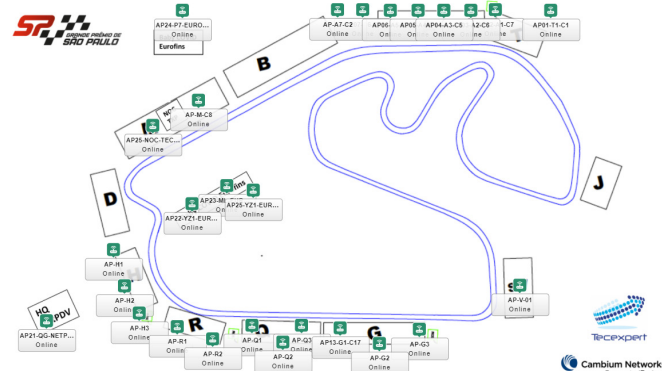
"The enterprise Wi-Fi 6 solution from Cambium Networks, managed by the cnMaestro platform, guaranteed us high visibility of the installed network. The operational indicators allowed us to act proactively, avoiding interruptions and impact on the customers' experience during the event. We also highlight the coverage offered by the XV2-2T outdoor Wi-Fi 6 AP in the most important area of our operation, delivering a high-quality user experience for VIP users in the dedicated area."

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Overview

WHEN IT COMES TO CONNECTING LARGE EVENTS, there is no room for doubt regarding performance. In 2021, the São Paulo Grand Prix received almost 200,000 spectators at the Interlagos racetrack. The event needed a stable and high-quality communication network to connect POS machines that would support cashless system transactions and COVID testing areas.
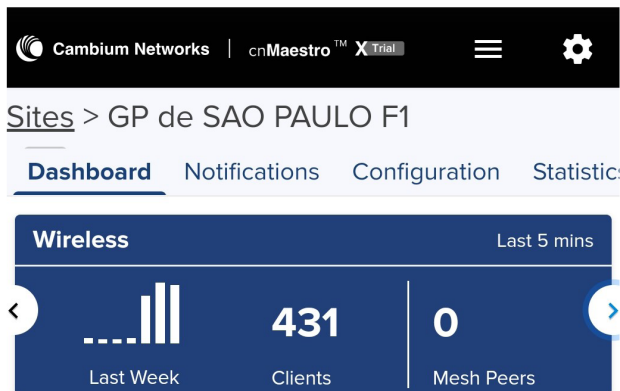

The Challenge

CAMBIUM WAS DIRECTLY RESPONSIBLE for interacting with MC BRASIL, a company which manages the Grand Prix in Sao Paulo. It was the first edition of the event after the pandemic. This year, additional Wi-Fi coverage was added to COVID testing areas.

All food and beverage purchases during the Formula 1 Heineken Sao Paulo Grand Prix 2021 would be made exclusively through the use of cashless consumer cards. The system would require attendees use prepaid cards exclusive to the event to make quick and safe purchases through credits that are loaded on the cards at the event's available cashiers. Without connectivity, it wouldn't be possible to carry out any food and beverage sales, resulting in a drop in sales and discontented eventgoers.

The movement of people during the three-day event required a

Sites > GP de SAO PAULO F1

Dashboard | Notifications | Configuration | Statistics

Wireless — Last 5 mins

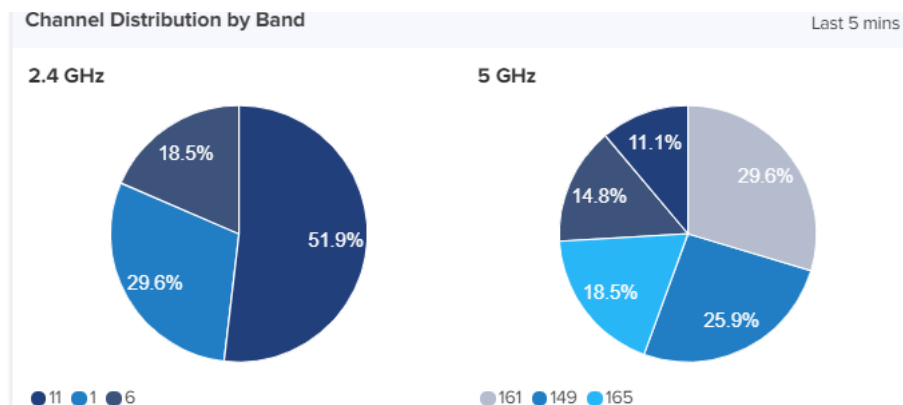| 431	0
Last Week	Clients	Mesh Peers

high-performance Wi-Fi access infrastructure to support all transactions, ensuring consistent and stable connections, independently of cellular networks. The traditional networks of mobile operators are overloaded during these events and cannot guarantee quality of service. This presents disconnections and retransmissions, resulting in huge lines while people wait for problems to be resolved.

The Solution

A TOTAL OF 27 WI-FI 6 APs were used to ensure coverage in indoor and outdoor areas; this included a combination of Cambium Networks' XV3-8, XV2-2 and XV2-2T Wi-Fi 6 access points (AP). In indoor areas, the XV3-8 and XV2-2 were used to connect to devices that use different 802.11 technology standards. A major highlight was the coverage of the XV2-2T outdoor Wi-Fi 6 AP, with an integrated high-coverage antenna. TecExpert installed the equipment and monitored on site during three days of the event.

The cnMaestro management and control solution allowed the team to remotely monitor all the installed equipment in real time. Zero-touch configuration, which allowed configurations to be applied to APs automatically, further simplified equipment setup. Through cnMaestro, it was also possible to update firmware remotely and reduce equipment installation time. cnMaestro also monitored the number of connected devices, traffic and signal quality.

SUCCESS FACTORS

- When looking for an external hotspot solution, really analyze the performance of this AP. What is the transmission power? How far can your integrated antenna really cover?

- For an internal network of access points, where we will not always have the best infrastructure available to install equipment, especially when we talk about events, which use temporary locations, ease of installation is a critical factor.

- How will compatibility be with different devices between laptops, cell phones, POS machines, which have different receiving antennas and operate with different Wi-Fi standards?

- Does your Wi-Fi solution deliver all this performance and still guarantee that in an eventual hardware/AP exchange, no additional configuration needs to be done?

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The Results

THE WI-FI NETWORK CONNECTED CASHLESS TRANSACTION MACHINES. During the 2021 event, there was a peak of 431 device connections. From a technical perspective, having a network where roaming is transparent is a must as POS machines change locations all the time. The troubleshooting rate was low and optimized through the management platform.

During the three days of the event, there were no equipment failures. Grand Prix cashiers were able to rely on the connectivity the entirety of the event. With a robust network guaranteeing the operation of transactions, it was possible to increase sales and ensure a good experience for spectators.

ABOUT CAMBIUM NETWORKS

Cambium Networks delivers wireless communications that work for businesses, communities, and cities worldwide. Millions of our radios are deployed to connect people, places and things with a unified wireless fabric that spans multiple standards and frequencies of fixed wireless and Wi-Fi, all managed centrally via the cloud. Our multi-gigabit wireless fabric offers a compelling value proposition over traditional fiber and alternative wireless solutions. We work with our Cambium certified ConnectedPartners to deliver purpose-built networks for service provider, enterprise, industrial, and government connectivity solutions in urban, suburban, and rural environments, with wireless that just works.

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