



# SADDLEBACK COLLEGE DEPLOYS HIGH-PERFORMANCE WIRELESS NETWORK IN NEW STADIUM

## EXECUTIVE SUMMARY

### CLIENT

Saddleback College  
Mission Viejo, CA

### CLIENT CHALLENGE

Provide aesthetically pleasing, reliable, and high-performing Wi-Fi to the entire stadium.

### PRODUCT SOLUTION

#### Universal Handrail Enclosure

- Aesthetically blends into environment
- Corrugated design enhances durability and provides additional impact protection
- Back-to-back antennas reduce RF interference
- NEMA 4X rating
- Mounts to any handrail from 1.5 to 2 inches in diameter
- Compatible with a range of access point models

Tessco SKU 230106

Veritas Managed Solution, a strategic value-added reseller (VAR) in the wireless communications industry, was contacted by Saddleback College in Mission Viejo, CA to deploy an aesthetically pleasing wireless network in their new 8,000-seat stadium. The goal was to provide high-speed Wi-Fi with seamless capacity and coverage for all stadium goers during football games and other community events.

## CHALLENGE

As with every stadium deployment, there are a variety of challenges that come with installing a reliable, high-performance wireless network. First being, the placement of the access points. It was important to find a location that provided maximum use of the 5 GHz channel while minimizing co-channel interference and channel reuse. The equipment needed to be close to fans to optimize the number of users per access point, increase bandwidth per user, and enhance capacity. There were limited viable options, including under the seat, overhead, or on the handrails, to achieve this goal.

The second challenge was durability. The enclosures deployed needed to be able to withstand regular wear and tear from fans and varying weather conditions, from rain to wind and temperatures as hot as 122°F. Third, the solution must be aesthetically pleasing, providing a disguised solution that does not detract from the stadium's appearance.

## SOLUTION

Mark Witherspoon, the Director of Wireless Network Services at Veritas Managed Solution, contacted Ventev to assist in this project for its long-standing history in successful stadium and large public venue deployments. Veritas determined the Ventev Universal Handrail Enclosure, a rugged weatherproof, NEMA 4X Polycarbonate enclosure



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that fits on the handrails of stadiums, arenas, and other large public venues, would be the best solution for the stadium's needs for a few reasons, including:

- Under the seat was not a mounting option due to the shallow bench style seating and neither was overhead mounting as there was no structure available. Handrail mounting was the only viable option.
- The handrail enclosures allowed the stadium to point antennas down different sides of the walkways sending wireless signal down individual rows, increasing coverage and capacity.
- The enclosures blend well into the environment, offering an aesthetically pleasing option.
- The enclosures have special membrane vents to help with device cooling through air circulation, enabling them to withstand the high temperatures the stadium faces in California.

Initially, the deployment was designed for Cisco 3802E access point models but was modified to support the newer Cisco 9120AXE and 9130AXE models mid-way through. Ventev was able to pivot seamlessly and reengineer its handrail enclosure with an alternate backplate assembly to work with the new access points and directional antennas required.

The handrail enclosures were staggered aisle to aisle to provide the best performance, with three on one aisle and four on the next, averaging an access point about every 45-75 seats. For field level locations, Ventev enclosures were flush mounted to the side wall with directional antennas providing field coverage.

## RESULT

Ventev provided 55 handrail enclosures to Veritas, who handled the installation throughout stadium. The stadium owners are happy with the end results and thrilled to have a wireless network that provides the fast and reliable Wi-Fi its fans come to expect at a football game or community event.

"Ventev was an easy choice for this project," said Witherspoon. "I've worked with them before and am familiar with the quality of their products. The handrail enclosure was the perfect solution for this deployment and the way Ventev went above and beyond to deliver a custom solution on time and within budget is that extra value that sets them apart from the rest."



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