## COMMSCOPE°

# CommScope Fiber is the Backbone of Allegiant Stadium

### Customer

Las Vegas Raiders, pro football team Las Vegas, Nevada

### Venue

Allegiant Stadium

## Challenges

- Newly relocated, storied pro football franchise competing for fans' attention in star-studded Las Vegas
- Large and diverse wired and wireless network
- Deliver superior on-demand user experience to massive crowds, now and in the future
- Compressed timeframe and limited working space

## CommScope solutions

- 227 miles of SYSTIMAX 100G fiber
- 284 miles of SYSTIMAX 10G 6A copper cabling
- Redundant 40 Gbps optical internet connections
- Powered fiber cabling



## More than 227 miles of fiber and 284 miles of copper cable installed in Las Vegas Raiders' new home

Any savvy sports executive will tell you that their business isn't sports, it's entertainment. So, if you're going to bring a team to star-studded Las Vegas, you'd better go big or go home. For the Las Vegas Raiders, a legendary football franchise with a new home, big is home. With help from CommScope, the Raiders will kick off their first season in Allegiant Stadium—arguably the most connected sports venue in the U.S. and maybe the world.

The 65,000-seat venue boasts 2,400 multi-media screens, 40,000 square-feet of HDR 4K-capable video boards, 1,700 Wi-Fi 6 access points, and a peristyle plaza overlooking the Las Vegas Strip that will surely be the most popular spot to take a selfie. For the Raiders' organization, this is the ante to play in the high-stakes professional sports market. As Matthew Pasco, the team's VP of Technology, said: "Connectivity is like a public utility, it's a requirement. It's paramount for the fan experience, and fan experience is paramount for us. With the advances of home theaters and the ability to watch at home with a large screen, you need to do something really special for your fans that come out."

When it comes to delivering a world-class fan experience, no connectivity infrastructure provider knows more than CommScope. With wired and wireless deployments in over 250 of the world's major sports venues, CommScope leads the market in connecting large sporting venues. So, as construction was beginning on Allegiant Stadium, Pasco and his staff were huddling with the sales and engineering team at CommScope to lay the groundwork for pro football's ultimate fan experience.

## A network as fast, strong and vast as Raider fans

The result of the CommScope/Raiders partnership is a vast yet highly integrated cabling infrastructure featuring 227 miles of fiber and 284 miles of Category 6A copper cabling. Like the Raiders' storied "Silver & Black" franchise, the stadium's new connectivity superhighway is built on world-class speed and staying power.

"CommScope's fiber optic cabling delivers the highbandwidth connectivity needed for a truly compelling and interactive Las Vegas Raiders fan experience."

#### Matthew Pasco Technology VP, Las Vegas Raiders

The CommScope SYSTIMAX 100G fiber backbone and 10G CAT 6A copper will deliver connectivity for critical stadium systems and applications such as high-resolution security cameras, fire and safety, HVAC and lighting controls, wayfinding, ticketing, concessions, merchandise, and parking. And with dual 40 Gbps redundant optical internet connections, it is designed to provide more than enough bandwidth for fans to stream, share, talk and text using the stadium's ultra-high capacity distributed antenna system (DAS).

"CommScope's fiber optic cabling delivers the high-bandwidth connectivity needed for a truly compelling and interactive Las Vegas Raiders fan experience," Pasco says, adding, "this includes HDR video replays captured by multiple cameras and angles."

#### Going where Ethernet can't

About 46 cameras and 86 wireless access points were located beyond the 100-meter requirement for traditional Ethernet. In these cases, the IT team deployed CommScope's powered fiber solution, which spans up to three kilometers.

### Tackling every challenge

The project, however, was not without challenges. For starters, the network itself was highly diverse and complex. Supporting the various wired and wireless applications with a single unified and integrated infrastructure involved multiple product portfolios, including network fiber, copper, coaxial cabling, ribbon fiber for DAS and more. CommScope is one of the only companies with the breadth and depth in its portfolio to provide the necessary fiber and copper infrastructure.

Time and space were also critical factors. To be ready for the kickoff of the 2020 season, network designers, project managers and installation crews were working against a compressed schedule. Tight coordination was critical, not only among those involved with the network buildout but between the dozens of other contractors involved in the stadium's construction.

With a lot of heavy equipment and materials crowding the worksite, staging the network buildout on-site wasn't an option. Instead, CommScope worked with distribution partner, Anixter, coordinating logistics to ensure materials were delivered to the site on time—not a day sooner or later.

## For the Las Vegas Raiders, home is big, exciting and connected!

Soon, the Raiders will kick off their first season in their new home, and the stadium, with its Vegas-worthy technology, is ready for prime time. Supported by the CommScope-enabled infrastructure, fans and staff will enjoy connectivity at all ten levels of Allegiant Stadium, including some 2,400 video screens, dynamic displays and smart signs. The network will enable fans to use their Raiders and Allegiant Stadium mobile app throughout the facility to find parking spaces, locate concession stands, order food directly to their seats and share their experience on social sites via livestreamed videos. CommScope couldn't be prouder to be part of the team that helped make it happen. "Our fiber is helping to deliver highbandwidth connectivity to hundreds of thousands of smartphones and tablets, enabling Raiders fans to feel like they are in the middle of the action – no matter where they are in the stadium," said Ben Cardwell, senior vice president of CommScope's Venue and Campus Networks.

For executives like Pasco, who recognize the fine line between sports and entertainment, technological capabilities mean happier and more loyal fans and a more successful franchise.

"With CommScope fiber, Allegiant Stadium is well-positioned for the future and ready to accommodate an ever-increasing number of standard client devices such as smartphones and tablets, along with evolving technology like augmented reality glasses and virtual reality helmets," Pasco adds.

Here in Vegas, the odds of success are in the Raiders' favor.

CommScope pushes the boundaries of communications technology with game-changing ideas and ground-breaking discoveries that spark profound human achievement. We collaborate with our customers and partners to design, create and build the world's most advanced networks. It is our passion and commitment to identify the next opportunity and realize a better tomorrow. Discover more at commscope.com.

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