

Charlotte, North Carolina
www.panthers.com

Stadium fast facts:

- 75,000 seat capacity
- Headquarters for the Carolina Panthers and includes training facilities, practice fields and administrative offices
- Home of the ACC Championship Game through 2019

Challenges

- Deliver fast, reliable cellular and data coverage
- Provide capacity for massive data surges
- Ease future infrastructure upgrades and expansions

Solutions

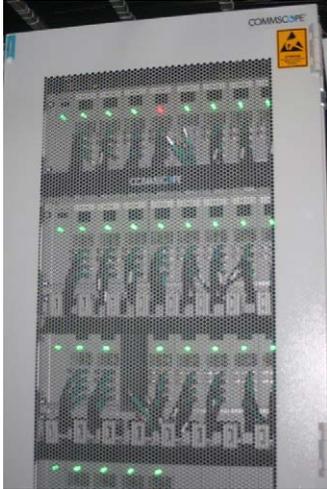
- CommScope® ION®-U Platform
- CommScope Broadband Network Solutions Optical LAN Solutions GPON cabling infrastructure
- Neutral Host DAS serving all four carriers
- 256 Remotes
- 313 MIMO Antennas

Carolina Panthers count on CommScope to deliver a winning fan experience

As one of the hottest teams in the NFL, the Carolina Panthers used the 2015 offseason to do more than update its playbook—the organization made sure the wireless fan experience at Bank of America Stadium in Charlotte, North Carolina, lived up to the action on the field. Calls, texts, tweets and photo uploads needed to be a reliable part of every game day. The Panthers sought an experienced partner to update the stadium's wireless network infrastructure and replace the existing carrier-led distributed antenna system (DAS).

The Panthers teamed up with the consulting firm Beam Wireless, Inc. to provide technical services and identify the best DAS vendor for the job. After considering the many available options, the Panthers and Beam Wireless chose CommScope's ION®-U for its technical features, which provide more network flexibility in a smaller footprint.

In a mere 90 days, the Panthers and Beam Wireless designed and deployed a completely new, venue-led neutral host DAS supporting four major wireless carriers.



ION-U® adds capacity without increasing complexity

ION-U is a robust, flexible solution that permits all 75,000 fans at the stadium to use their mobile devices any way they want. App usage, check-ins, shares and chats peak at football games, concerts and other events hosted by the stadium. It supports multiple operators, frequency bands and air interface technologies in one unified, low- and high-power system. Network engineers can adjust power levels on ION-U all the way down to individual frequency bands for better optimization. Thanks to its integrated base transceiver station interface solution, the Intelligent Point of Interface (i-POI®), ION-U reduces footprint requirements at the headend, where space is limited. ION-U also comes with integrated guidance and intelligence that removes the guesswork and expense from system commissioning and maintenance.

CommScope supplied the active ION-U components as well as the cables, antennas and low passive intermodulation (PIM) devices to ensure a high-performing, total solution. Rack mount fiber chassis, adapter plates, fiber optic connectors, splitter modules and fiber patch cords also played into the design and deployment of an optical local area network (LAN) solution for a gigabit-capable passive optical network (GPON) in the stadium suites and high-performance structured cabling to help support the DAS. Qypsys, a nationwide system integrator specializing passive optical LAN, led the GPON/Optical LAN solutions installation. CommScope's high-performing enterprise connectivity components helped make deployment quick and easy.

The robust Optical LAN fiber network infrastructure helps the Panthers support stadium operations and deliver an integrated, engaging fan experience. This integrated infrastructure enables applications such as high-bandwidth data, voice, Voice over Internet Protocol (VoIP) and Wi-Fi services; high-definition TV and hospitality services for more than 150 executive suites; and broadband video.

The Panthers follow the trend of enterprise DAS ownership

The Panthers' leadership role in the process highlights a trend of venue owners taking active roles in selecting, managing and owning a DAS to bring increased value to their customers.

"Providing an exceptional experience for our fans—on the field and in the stands—is a top priority for the entire Panthers organization," says James Hammond, director of information technology for the Carolina Panthers. "We decided to acquire the DAS ourselves in order to take greater control of the wireless fan experience, speed the deployment process, and make future upgrades and optimization easier for network operators."

CommScope (NASDAQ: COMM) helps companies around the world design, build and manage their wired and wireless networks. Our network infrastructure solutions help customers increase bandwidth; maximize existing capacity; improve network performance and availability; increase energy efficiency; and simplify technology migration. You will find our solutions in the largest buildings, venues and outdoor spaces; in data centers and buildings of all shapes, sizes and complexity; at wireless cell sites and in cable headends; and in airports, trains, and tunnels. Vital networks around the world run on CommScope solutions.



www.commscope.com

Visit our website or contact your local CommScope representative for more information.

© 2016 CommScope, Inc. All rights reserved.

All trademarks identified by ® or ™ are registered trademarks or trademarks, respectively, of CommScope, Inc.

This document is for planning purposes only and is not intended to modify or supplement any specifications or warranties relating to CommScope products or services.

CU-110156-EN (07/16)