



How NETCOM Technologies Tackled a Major Hospital Expansion

With Fewer Points of Failure and Greater Savings

Installation Partner:
NETCOM Technologies

Location:
Arlington, VA, USA

Industry segment:
Healthcare, Parking

The Situation

NETCOM Technologies, a systems integrator based in Rockville, MD was preparing to provide the security and telecommunications infrastructure for a major expansion of the Virginia Hospital Center in Arlington, VA.

Netcom's role was to install telecom, security cameras and access control in a massive parking garage and in an adjacent Outpatient Pavilion for the hospital. This new facility would give patients direct access to treatment areas upon their arrival at the parking garage.

The parking garage is immense with 1,700-spaces, including three levels of below-grade parking and six levels above-grade. This nine-story parking garage structure has only one closet at the very bottom in the basement level. Many of the cable runs were going to be upwards of 650 feet, easily exceeding the Category 6 cable distance of 100 meters. NETCOM was also facing a tight deadline on the project.

The Solution

Eddie Byrum, Netcom's Director of Security Operations and his team had originally considered using standard Category Six cabling with PoE extenders for the over 60 cameras to be installed throughout the parking garage. However, basically every run would be over the 100-meter limit, requiring extenders on each. "Having Cat6 jacks, PoE extenders and patch cables throughout each run provides more points of failure," said Byrum.

Then, Eddie Byrum considered an alternative



“My guys love it. We will definitely be using it on other projects, especially school projects and other parking garages...really anything that has a need for cabling over 300 feet, which we do run into quite a bit.” - Eddie Byrum
Director of Security Operations, NETCOM

to deliver data and power (PoE) to all cameras and access points in excess of 300 feet.”

solution – one that would literally be a gamechanger for the project. He discovered GameChanger Cable, which is optimized for long distance applications, delivering 1 Gb/s performance and PoE+ over 200 meters, thanks to increased gauge size, carefully designed twisting and specialty materials,

“We were able to remove the extra connections by using the GameChanger and reducing the risk for future service calls. We also removed those points of failure for the customer,” said Eddie Byrum. This option would also eliminate the cost of the over 60 extenders that would have been required, as well as the labor required to install them – a savings of over \$18,000. The greatly streamlined installation would also help NETCOM meet the project’s tight deadline.

Before proceeding with the project, Doug Kawtoski, Netcom’s Security Project Manager, and David Zimmerman, Netcom’s Security Engineer, performed a thorough test of GameChanger Cable with “the highest-powered camera we could find” and ran it through its paces for a week. The solid performance of GameChanger in this test convinced Eddie Byrum it was a real and viable solution for the Virginia Hospital project.

As the project later moves on to the Outpatient Pavilion, there will be some locations where Eddie Byrum had been planning to use fiber and a separate run of power. “We will now use GameChanger Cable

With the success at Virginia Hospital Center, Eddie Byrum says that GameChanger will now have a place on many of NETCOM’s installations, “My guys love it. We will definitely be using it on other projects, especially school projects and other parking garages... really anything that has a need for cabling over 300 feet, which we do run into quite a bit.”



About NETCOM Technologies

NETCOM Technologies, Inc., designs, builds, and maintains telecommunications infrastructure, physical security, IoT, as well as audio and video systems for commercial and government end users. Founded in 1988, by CEO Roy Rea, and based in Rockville, MD, NETCOM serves customers in Washington DC, Maryland, Virginia and across the United States.

GameChanger Part Numbers:
258310333 - Riser, Yellow w/ White Stripe
258300336 - Plenum, Blue w/ White Stripe
258300310- Plenum, White
258330804 - OSP, Black
258340804 - OSP Shielded, Black
258802404 - ITC-HL, Armored, Black

US Patent No.'s 10,453,589
11,107,605

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