



Revolutionizing Connectivity, Rapidly and Reliably.

Military

### Responding quickly to connect mission-critical military communications



Cambium Networks, a leading global provider of wireless broadband solutions, relies on Amphenol Custom Cable to help deploy mission-critical connections, from military bases and battlefields to industrial enterprises and smart cities.

Situation: In combat zones and military bases, securing communications with speed, accuracy, and agility are of critical importance.

In 2018, Cambium Networks needed to deploy three (3) shielded outdoor Cat5e cable runs for connectivity at hundreds of U.S. Army communications and surveillance centers throughout multiple countries worldwide. The problem was that the three individual cables ran under protective expanded tubing which was expensive, extremely heavy to transport, and difficult to recoil for redeployment.

Responsive, Fast Cable Solution: To meet the mission-critical communications needs of our nation's military, Cambium Networks enlisted Amphenol Custom Cable to work with cable suppliers, engineers, and buyers to create a unique redesign of the cable formation rapidly. Within several weeks, a customized cable solution was developed in collaboration with Cambium Networks. A new three-cable configuration housed in a single jacket reduced the size of the cable composition by one-half inch, leading to a 47% reduction in weight which increased the speed and ease of transport, installation, and storage immensely. In addition, significant cost savings were realized.

"Every cable connection is critical to maintaining our nation's safety and security, both at home and abroad. That's why we depend on Amphenol Custom Cable."

- Anthony Calloway Regional Technical Manager, Cambium Networks

#### **Cambium Networks Serves:**

















Custom PTP 700 Tactical Drop Cable kit for a complete, deployable communications system that helps expedite efficient, fail-safe installations.



#### SPEED

Several weeks, from concept to delivery



#### **CUSTOMIZED SOLUTION**

Cable reconfiguration reduced cost, saved time



#### **100% INSPECTION**

Made in U.S. to highest industry standards



#### **ENGINEERING & SUPPORT**

Mission-critical, one-stop reliability and expertise

## A Closer Look at the Technical Specifications



# Client Project: Cambium Networks Molded Antenna Solution Custom PTP 700 Tactical Drop Cable Connectivity Kit

**Objective:** Deploy three (3) shielded outdoor Cat5e cable runs for connecting hundreds of U.S. Army communications and surveillance centers throughout numerous countries worldwide.

Cable Design Request: Design a rugged, outdoor rated Cat5e cable that has overall shielding and individual shielding in the smallest and lightest footprint possible. With the help of our engineering team, working directly with the technical engineers at Cambium Networks, we designed a new cable that meets strict requirements. The outside diameter was reduced to <.5", and the weight was reduced from 71+ lbs. per 100 mtrs., to 37 lbs. per 100 mtrs.



**Customized Solution:** A new, unique three-cable configuration housed in a single jacket to reduce size, weight, transport time, storage requirements, and cost, while increasing installation efficiency.

Amphenol Custom Cable designed this assembly with the customer requirements and aesthetics in mind. Our over-molded solution is both incredibly functional and aesthetically appealing. The raised "Key Indicator" makes mating in the field extremely easy and repeatable. The exterior also features a Cambium Networks logo brand recognition as well as branding across the cable itself.



To increase ruggedization, we also replaced the current nylon dust cap lanyard that can fail in intense heat and humidity conditions. Amphenol Custom Cable designed and manufactured a heat- and humidity-resistant, coated stainless steel lanyard to solve the problem.

The customized assembly is extremely durable and rugged, capable of withstanding strict and harsh environments.

