

CommScope M-LOC Next Generation cluster solution



Cell towers are becoming increasingly overcrowded with antennas and related equipment. To alleviate tower loads and control tower-related expenses, mobile operators are upgrading antennas typically supporting two to eight radios. The result is an increasing number of RF ports that are packed within the same physical space as the older antennas. As antenna port counts increase, the time, complexity and physical risks of connecting dozens of connectors—while suspended atop a tower—creates a new challenge for mobile operators and their installation partners.

Understanding the trend toward more complex radios such as multiband FDD 4T4R and LTE TDD/5G NR 8T8R, CommScope has designed and developed M-LOC, a second-generation cluster connector technology. In addition to reducing installation time and costs, these new cluster connectors address key challenges such as mating issues, PIM reduction, advanced radio support and cable manageability.

Operators can now choose from cluster connectors that are optimized for reliable and consistent PIM performance for a wide range of applications—enabling them to take advantage of new antenna designs.

Similarly, connector OEMs are finding ways to better control insertion loss between the radio and antenna—leveraging the latest 3/8-in jumpers from CommScope that combine best-in-class attenuation with ease of deployment. By re-arranging the individual connectors, manufacturers can mate the cluster connector to larger diameter cables and reduce insertion loss.

Moreover, several BSA manufacturers are already using M-LOC for their products to simplify deployment, mitigate PIM and improve performance.



Key facts

- Patented latching mechanism
- Four- and five-port configurations
- Compact form factor footprint
- Available with ¼-inch and low loss ⅜-inch jumper
- Dynamic PIM performance
- IP68 rated

Fast and easy installation

- Multiport coaxial connection for easy and fast installation: just seven seconds to make four or five antenna connections
- Designed to be installed without tools, and virtually without training, as there is only one way to fasten it
- One-handed blind mating; visual indication and audible feedback of secure mating—taking mating uncertainty out of the equation
- Matching protrusion on housing; tamper resistant
- Center port flexibility—can be calibration or AISG

Application

- Outdoor macro network
- Outdoor small cells
- 5G multi-band antennas
- Multi-port communication devices

About CommScope

CommScope's reputation as a trusted expert is built on over four decades of RF innovations, considerable investment in research and development, and more than 15,000 patents. We take a system-level approach, with a proven process based on:

- Innovative design
- The constant search for optimized performance
- Reliable delivery

Our products are designed to help address space constraints, provide performance you can rely on, and simplify deployments. And, as our job is to know what's next, we are an active member of the world's network-focused standards bodies like NGMN and AISG—to contribute to defining the standards upon which present and future networks will be based.

Compare M-LOC
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Take a closer look at M-LOC
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