



HELIAX® SureFlex™ premium cable assemblies

Exceptional performance—guaranteed

Designed to address your network modernization challenges

The network modernization process is becoming increasingly complex. Today's 2G, 3G and 4G wireless networks are evolving from conventional sites to top-of-the-tower remote radio unit (RRU) sites. As technology advances—pumping more data through less spectrum—radio frequency (RF) performance standards are becoming more stringent. Your ability to remain agile within a volatile market remains vital to your success—but the lead time for site development is shrinking.

New HELIAX SureGuard® weatherproofing technology

Guaranteed for low PIM, VSWR and DTF

Protect your network investment



From the base station to the tower top, HELIAX SureFlex premium cable assemblies help eliminate the weak links in your network.

Wireless service providers must accommodate both conventional and fiber-to-the-antenna (FTTA) site architectures with multiple components. At the heart of it all—connecting all of the equipment you use—are your assemblies. Dozens of them. Each must deliver consistent and superior electrical performance. If even one assembly fails, the cost to troubleshoot and replace it can be steep.

SureFlex features new series with patented HELIAX SureGuard technology!

CommScope offers a factory-installed, molded-boot weatherproofing system designed to seal connector junctions between jumpers and antennas, RRUs and amplifiers.

- Reusable, easy-to-install solution in tight, congested areas
- Each compact boot securely protects RF connectors
- Prevents moisture corrosion in extreme environments

Visit our eCatalog for specific part numbers. (This product is covered by U.S. Pat. No. 6,429,373 and pending applications.)

Tested and guaranteed

From base station to tower top, there should be no weak links in your network. That's why CommScope designed HELIAX SureFlex cable assemblies—a vital part of our premium Andrew® portfolio of wireless solutions.

SureFlex = premium RF performance

Using a patented process, SureFlex cable and connectors are physically bonded to create an assembly that delivers outstanding RF results where they matter most: passive intermodulation (PIM), voltage standing wave ratio (VSWR), and distance-to-fault (DTF). When compared to competitive field-fitted assemblies, HELIAX SureFlex provides better protection against environmental degradation. CommScope tests each assembly for PIM, VSWR and DTF—sharing the results at <http://www.commscope.com/webtrak>. Once installed, the final assembly is backed by our iron-clad 10-year warranty and guaranteed to IP66 and IP68 standards for weather resistance.





A powerful solution—an exceptional process

Developed and patented by CommScope, the innovative, manufacturing process used to design SureFlex cable assemblies features premium Andrew components. Components are fused to create an integrated assembly with superior physical and electrical integrity.

HELIAX cable and matching SureFlex connectors are specifically engineered to be used together, optimizing RF performance and extending long-term reliability.

- Automated cable prep: The process begins with the jacket being removed from the cable end. Specialized machinery cleans the cable surface and preps the cable for connector attachment.
- Solder connection: A 360-degree, lead-free solder joint is used to physically bind connectors to jumpers. Each connector and cable end is bonded on both the inner and outer contact surfaces using a continuous bead of solder. This helps ensure optimal RF performance by preventing water ingress and the loosening effects of tower vibrations.
- Pin depth: The depth of the center conductor is carefully monitored in real-time to ensure consistent VSWR performance.

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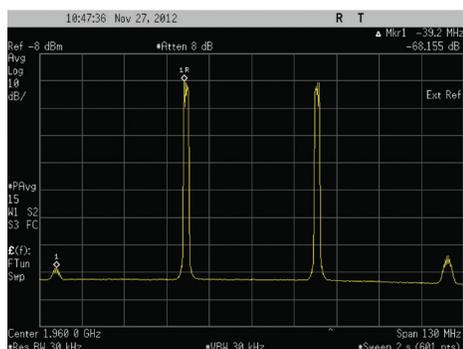
SureFlex—the high-performing, future-ready solution

Your network requires solutions that evolve to meet dynamic challenges. Deploy HELIAX SureFlex premium cable assemblies—available only from CommScope—and protect your network against dropped calls and costly outages.

The exceptional RF performance of SureFlex assemblies makes them the ideal choice for 4G technologies like LTE and RRH deployments. Maximize future network revenue by investing in its protection.

Environmentally rugged and shipped pre-assembled right out of the box, SureFlex simplifies field construction, requires fewer tools, reduces site costs and lowers inventory carrying costs—OpEx savings that directly impact your bottom line.

Passive Intermodulation (PIM)



Defined as the unwanted signals generated by the non-linear mixing of two or more frequencies in a passive circuit, PIM is an obstacle to network efficiency.

Antennas and radios are now hypersensitive, susceptible to smaller and smaller levels of distortion. A 1 dB drop in uplink sensitivity due to PIM reduces coverage by 11 percent with significant reduction in data throughput.



Every component in the RF path has the potential to contribute to PIM. Common causes include:

- Surface oxides
- Loose metal-to-metal contacts
- Surface contaminants
- Contact between dissimilar metals
- Improperly torqued connections
- Structures or objects in close proximity to sites

Identifying PIM and localizing the offending components can be difficult. Tell-tale symptoms can masquerade as an under-performing system:

- Lost channel capacity
- Reduced cell coverage
- Decreased data transmission rates
- Dropped calls
- Lower overall quality of service

CommScope understands the subtle nuances of cable assembly technology. We engineer, manufacture and test each SureFlex assembly to help ensure long-term reliability.



CommScope certified report systems: Access factory performance testing on the go

WebTrak®

WebTrak provides 24/7 factory testing reports, including attenuation and cable construction for CommScope fiber, hybrid fiber and twisted-pair cables; cable assemblies and base station antennas. Start using it today: visit <http://www.commscope.com/webtrak>.

cTrak

The mobile version of our WebTrak certified report system, cTrak is just one more way CommScope assures you of the quality and high network performance you expect from a SureFlex solution. **Download cTrak** from iTunes today!

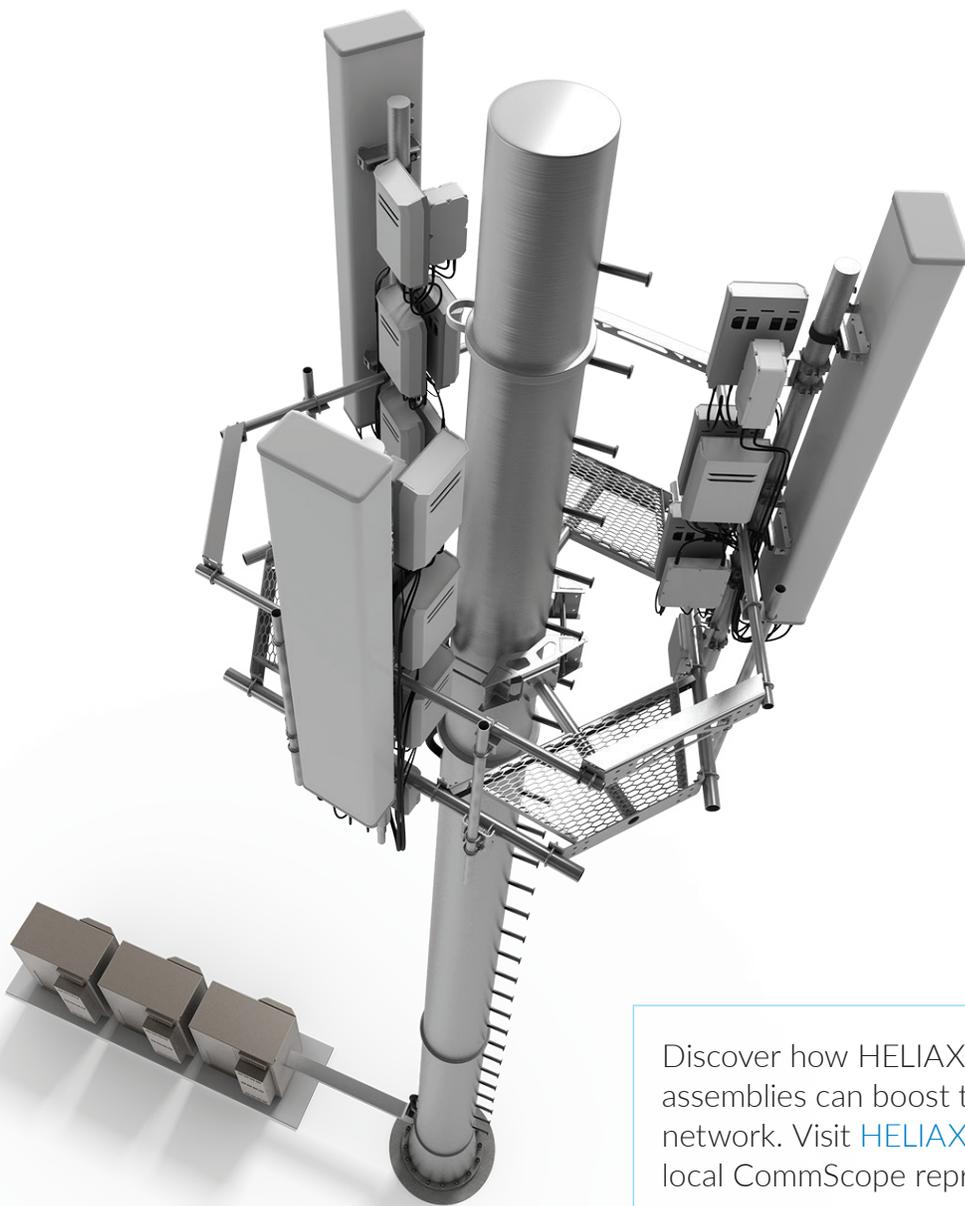


HELIAX SureFlex: Protect your network modernization investment

Simply put, the performance of SureFlex premium cable assemblies is guaranteed in writing. If you need to consistently meet system PIM performance levels, eliminate installation variables and provide long-term protection against moisture ingress and other environmental threats, SureFlex—with SureGuard weatherproofing technology—is the answer.

SureFlex cable assemblies are pre-manufactured and tested in a tightly controlled environment, so they arrive on-site, on-time. Supported by our streamlined distribution process, expect to receive your SureFlex solution when and where you need it.

Protect your network investment: enhance performance and save valuable time while minimizing the potential for connection errors. It all adds up to a level of reliability and savings demanded by today's challenging network modernization process.



Discover how HELIAX SureFlex premium cable assemblies can boost the performance of your network. Visit [HELIAX SureFlex](#) or contact a local CommScope representative today.

Everyone communicates. It's the essence of the human experience. *How* we communicate is evolving. Technology is reshaping the way we live, learn and thrive. The epicenter of this transformation is the network—our passion. Our experts are rethinking the purpose, role and usage of networks to help our customers increase bandwidth, expand capacity, enhance efficiency, speed deployment and simplify migration. From remote cell sites to massive sports arenas, from busy airports to state-of-the-art data centers—we provide the essential expertise and vital infrastructure your business needs to succeed. The world's most advanced networks rely on CommScope connectivity.



commscope.com

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

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