

RF Basics – Data Systems

Our Times Microwave RF Basics series covers common coaxial cable uses and our design solutions. Last month we expanded on test and measurement applications. In part 6 of this series, we will discuss data systems.

DATA SYSTEMS

Wireless data supporting sensors & data links

Challenges

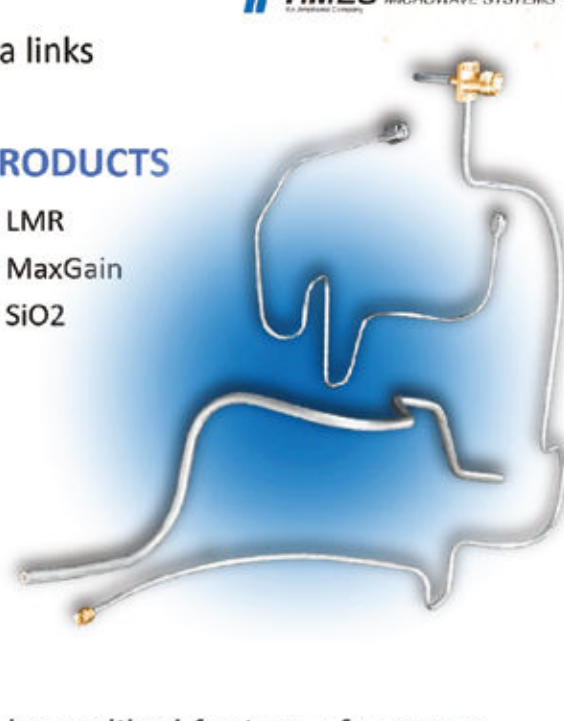
Reliability. Data is more noise tolerant than voice, but devices are often used in extreme environments, or hard to access locations.

Typical Applications

- SatCom
- GPS
- 5G

PRODUCTS

- LMR
- MaxGain
- SiO2



Data transmission from point A to point B is a critical feature of sensors, machine-to-machine monitoring, Internet of Things (IoT) applications, GPS, SCADA, 5G data, RFID, in-flight data systems, electron colliders, and more.

These systems are often deployed in extreme environments or in locations that are difficult to access. Coaxial cables and connectors used within data systems need to ensure reliability across the board.

Product Spotlight – TMQ4/TMQ5

The increasing demand for high coverage MIMO antennas used in 5G applications has led to substantial growth in the number of RF ports - antennas are shrinking in size as higher frequency bands are used to accommodate larger bandwidth requirements.



This means more antennas in smaller spaces creating numerous installation, torquing, and weather sealing challenges, and more.



We will be releasing our TMQ4™ and TMQ5™ bundled, multiport cable assemblies to help address these challenges in the upcoming weeks.

The new TMQ4 and TMQ5 solutions combine industry-standard four and five conductor MQ4/MQ5-multiport connectors with our bundled coaxial cables. These bundled solutions check all the boxes in terms of antenna port densification, saving a lot of labor with quick and easy fool-proof installation.

The entire bundle is sealed to IP-67 specification and features excellent UV resistance, adding to the assembly's durability for long-term performance.

Stay tuned for the upcoming product release.

European Expansion

Times Microwave Systems has been expanding its global operations over the past few years to better serve European markets. The master distribution facility we opened in 2019 in the Netherlands allows us to supply quick delivery to local distributors and customers with a highly responsive, European-based team providing customer service and technical support.



[Watch the virtual tour of our Master Distribution Hub in the Netherlands](#)

Since that time, we have also opened a manufacturing operation in Estonia. Times' Estonia production is in partnership with Ionix, an Amphenol company that specializes in manufacturing high-performance wiring harnesses and sub-assemblies.

Both investments support our strong commitment to the European market and place our high-end RF cable assemblies closer to customers' operations. These facilities provide local, cost-effective manufacturing capabilities and inventory support for a variety of products.

Along with our presence in the US, China, and India, these European capabilities support our customers globally and continue to solidify our position as the leader in RF and microwave solutions worldwide.

Upcoming Webinars



Don't miss our next webinar, "Low PIM RF Interconnects for the Telecom Market" on August 15, 2021 at 2:00 pm ET.

[Register today!](#)

Featured Article

Our experts have been busy sharing perspectives with the RF world on emerging industry trends, from 5G to healthcare. Check out our newest article from *AGL Magazine*.



[5G: Redefining the Requirements for Small Cell Coaxial Cables and Connectors](#)



You Ask, We Answer

Q. What are the advantages of using a bundled cable over individual runs?

There are many. First, bundled cables offer an increased ruggedness and protection as well as the ability to use more rugged standard mounting accessories. Second, they eliminate the need to ring out or identify each individual run. Third, it often improves aesthetics while reducing installation time and labor. Finally, bundled cables offer an easier weather sealing solution, improving cable longevity.

—Kevin Moyher, Product Manager