

You asked, we delivered.

In case you missed them, here are the most popular articles we wrote in 2021.

Medical Applications

Powering MRI's: 3 RF interconnects considerations to Save Time and Money

RF interconnects, including coaxial cables and connectors, are an integral part of MRI systems. Early awareness of challenges such as transmission loss, ease of installation and infrastructure requirements can help with performance and cost optimization in the design of new MRI systems.

[Full Article](#)



How high-frequency interconnections affect microwave ablation systems

Microwave ablation systems provide nonsurgical methods for treating internal cancers and tumors. This application requires the right cable assemblies to achieve optimum performance.

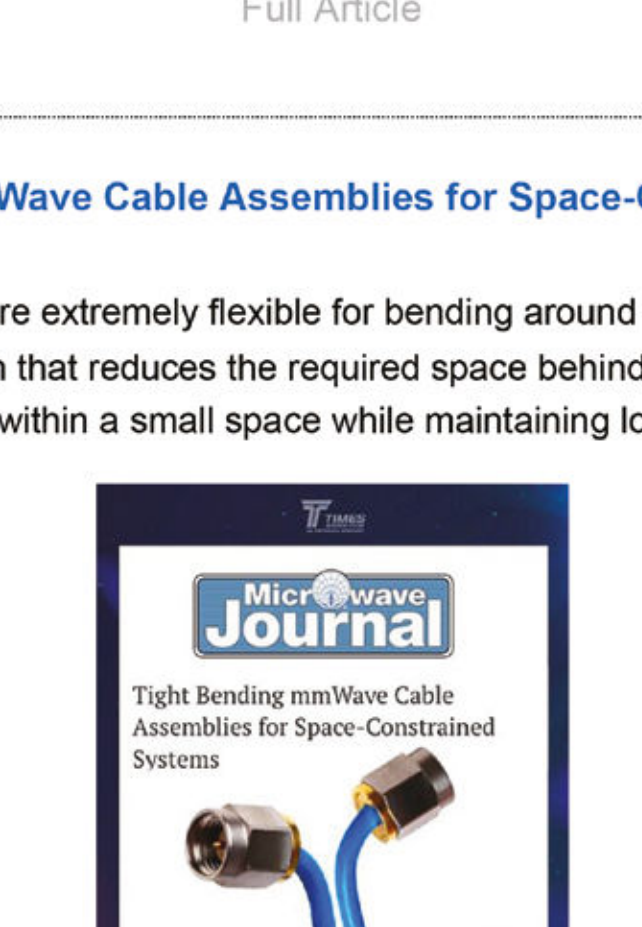
[Full Article](#)

5G Challenges and Solutions

Optimizing RF Interconnects in 5G Space to Ground Networks

As commercial industries increasingly work to advance and expand connectivity with powerful new 5G technology, space-based platforms and satellites will become an even more critical part of the global 5G network.

[Full Article](#)

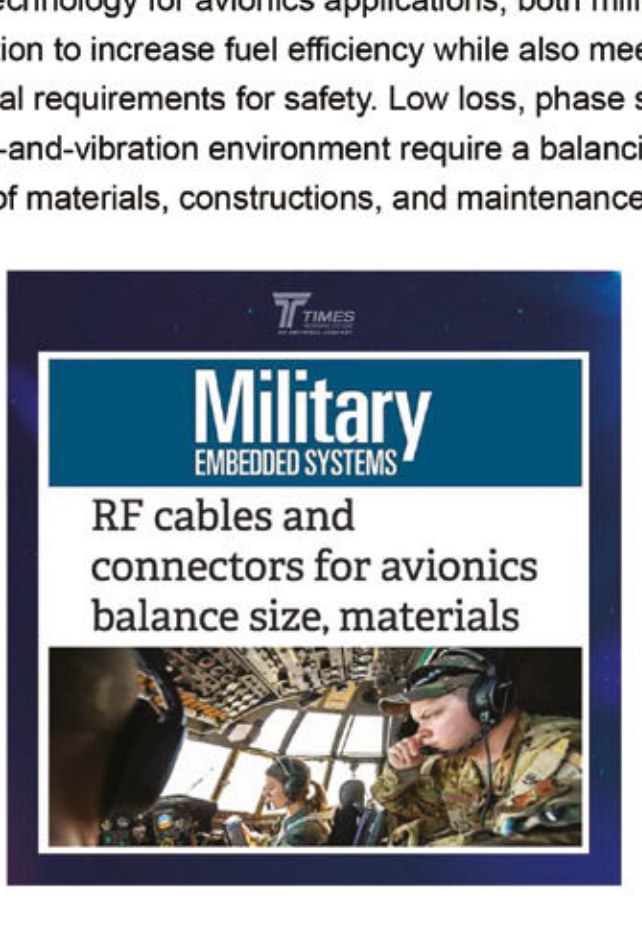


5G: Redefining the Requirements for Small Cell Coaxial Cables and Connectors

The race is on worldwide to develop and deploy innovative new 5G products that promise to deliver increased peak data speeds, ultra-low latency, enhanced reliability, enormous network capacity, and increased availability. As a result of these requirements, antennas have become increasingly complex. At the same time, there is pressure to minimize the size of these antennas since they are often placed in areas where people will see them, unlike the macro antennas used on traditional cell sites.

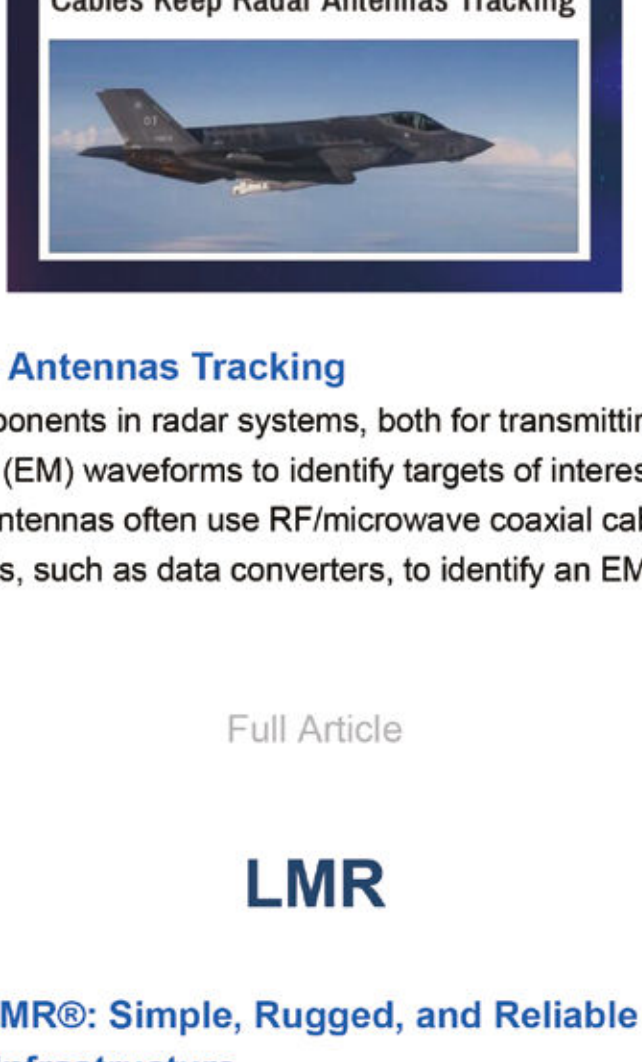
Test and Measurement Connections in the World of 5G

Connectors and cabling can be as important as the test instruments used to check out systems operating in the 5G realm. Unlike previous cellular technology generations that were focused on a specific frequency band, 5G deals with a much larger potential frequency range – which introduces new challenges for 5G testing such as repeatability, reliability and reproducibility. As with any RF testing, measurements require unique coaxial cable and connector setups – and it's critical to ensure signal integrity for RF interconnects.



[Full Article](#)

Product Innovation



New Connector Design Addresses Significant SMP Shortcomings

The SMP connector came on the scene as a smaller alternative to SMA connectors. Now a new generation of LMP connectors are available for high-reliability, high-vibration, and high-power applications.

[Full Article](#)

Tight Bending mmWave Cable Assemblies for Space-Constrained Systems

InstaBend™ cables are extremely flexible for bending around tight corners, using a new connector design that reduces the required space behind the connector. This helps fit more cables within a small space while maintaining low loss and VSWR.



[Full Article](#)

The Sign of Times is Here! Special Edition



[Full Article](#)

RF Interconnect Solution for Complex Antenna Installations

Unmanned aerial vehicles (UAVs) require a significant number of electronic components for data recording and transmission purposes, as well as for avionic functions. Of these components, antennas are among the most important, as they allow the vehicle to transmit and receive information from other systems, as well as communicate with those on the ground. Just as critical as antenna performance is its connection to the coaxial cable.

RF cables and connectors for avionics balance size, materials

Radio frequency (RF) technology for avionics applications, both military and commercial, prioritizes weight reduction to increase fuel efficiency while also meeting stringent electrical and mechanical requirements for safety. Low loss, phase stability, and high performance in a shock-and-vibration environment require a balancing act to reduce size with careful evaluation of materials, constructions, and maintenance.



[Full Article](#)



Cables Keep Radar Antennas Tracking

Antennas are vital components in radar systems, both for transmitting and receiving pulsed electromagnetic (EM) waveforms to identify targets of interest. In smaller, lower-power radar systems, antennas often use RF/microwave coaxial cable assemblies to link to other key components, such as data converters, to identify an EM-illuminated target in the field.

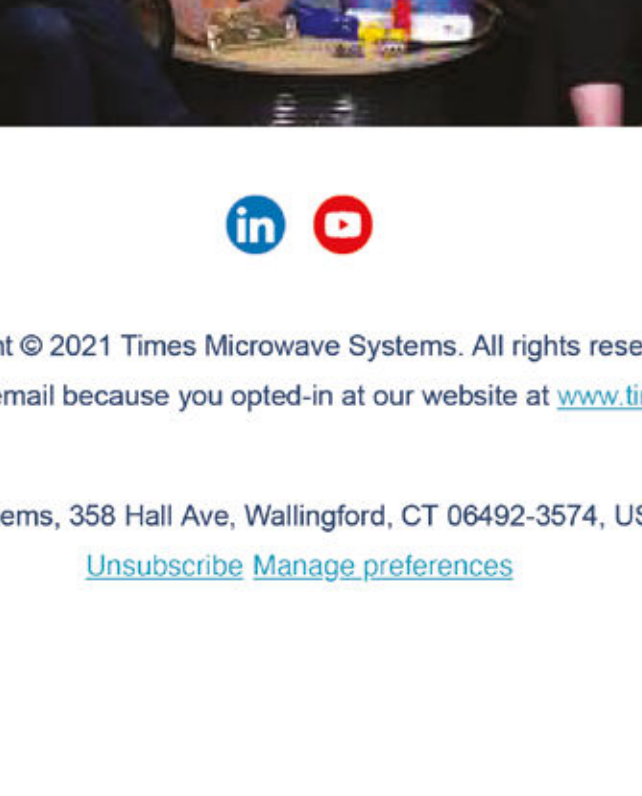
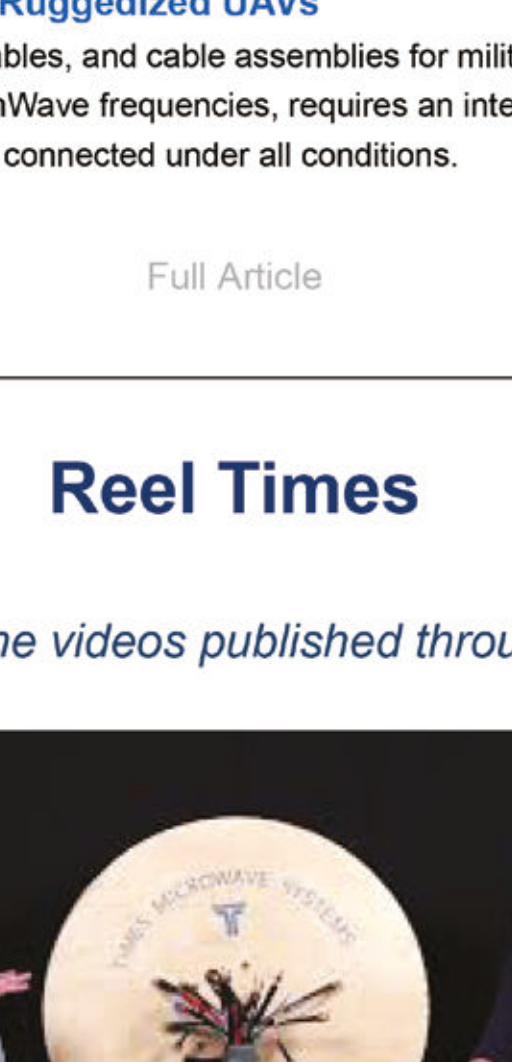
[Full Article](#)

LMR

Times Microwave LMR®: Simple, Rugged, and Reliable RF Solutions to Power the Utilities Infrastructure

Utilities are critically important infrastructure, and RF is a key component required to support it. The RF systems that power today's utility infrastructure must operate interference-free at all times. However, many are often used in extreme environments and are exposed to harsh conditions—including varying weather conditions, natural disasters, etc.

[Full Article](#)



Cable Assemblies: The Real Cost of Fakes and Clones
Is your RF interconnect system not performing as promised? Then there's a good chance an unscrupulous supplier has hoodwinked you. Inferior products are being sold under false pretenses – claiming to be what they are not, sometimes even using familiar brand names to identify their imposters. LMR® cable, connectors and assemblies are perfect examples.

[Full Article](#)

Naval and Shipboard

Designing safety into high-performance, ultra-reliable RF systems for Shipboard Applications

One of the most critical dangers on a ship is fire. In confined spaces, fire quickly fills an area with smoke, which can drastically impede safe evacuation. It becomes difficult for passengers to find exit signs, for example. Added dangers include toxic gases and a lack of replacement air, especially on a submarine. If a fire occurs in this type of confined space, it is crucial that the wiring and cables on board do not give off toxic or optically dense gases. The more cabling required in a confined space, the more important it is to use low smoke/zero halogen cables for passenger safety.

[Full Article](#)

[Full Article](#)

Powering High Performance, Ultrareliable RF Systems in Military Electronics

Military radio frequency (RF) systems must be designed to withstand the rigors of the often-harsh environments in which they will be used, while at the same time achieving extremely high performance for mission-critical applications. Low-smoke, zero-halogen, and phase-stable cable assemblies for these RF systems fulfill these high-reliability needs.

Customer Support

Times Microwave Commits to Europe Manufacturing

Ben Reed, General Manager, Times Microwave Systems discusses the company's European expansion and commitment to European customers. The pandemic has shown that local manufacturing capabilities and redundancy are key to global companies ensuring resilient supply lines.

[Full Article](#)

Test and Measurement

The Sign of Times is Here! Special Edition

[Full Article](#)

Rapidly Advancing Technologies Create New Challenges for RF Test and Measurement

Test leads are used in just about every manufacturing space that deals with electronics, including avionics, wireless infrastructure, semiconductors, and more. The typical RF testing process involves a device under test connected to a vector network analyzer (VNA), oscilloscope or spectrum analyzer. The signal path from the instrument to the circuit board is critical, and the user needs to make sure the test setup does not introduce unwanted variables.

Test and Measurement connections in the world of 5G

This broad span of frequencies has introduced new challenges for 5G testing including repeatability, reliability, and reproducibility. As is the case with any RF testing, measurements require unique coaxial cable and connector setups— and it is critical to ensure signal integrity for RF interconnects. Measurement repeatability is key as these systems are connected and disconnected often. The connectors and cables must withstand extensive handling, and the materials they employ must be optimized.

[Full Article](#)

UAV's

Making Connections in Ruggedized UAVs

RF connectors, cables, and cable assemblies for military UAVs, especially as they increase their use of mmWave frequencies, requires an intelligent balance of many factors to keep every system connected under all conditions.

[Full Article](#)

Reel Times

Check out all of the videos published throughout the year!

