

# **Inside RF Industries**

A Letter of News and New Products — Issue 1, 2014



## Plenum Rated, Low PIM, Low Loss Coaxial Cable Assemblies for indoor/outdoor Distributed Antenna Systems (DAS)



Coaxial cable assemblies for in-building wireless applications are required to meet building fire codes when installed in air return plenums (drop ceilings, raised floors). RF Cable Assembly, division of RF Industries, manufactures plenum rated assemblies using Times Microwave SPP-250-LLPL<sup>™</sup> corrugated or TFT-402<sup>™</sup> flat braided cables—ideal for cellular base station and DAS installations.

- Meets UL910 fire requirements for plenum cable
- Low PIM: less than -160dBc
- Low Loss
- Terminated with 7-16 DIN, 4.1-9.5 (Mini) DIN, N and SMA connectors
- Highly flexible, low minimum bend radius
- 100% PIM tested



Division of RF Industries





Division of RF Industries

#### Low PIM performance ensured through product testing

Many factors contribute to manufacturing a Low PIM product, including materials, design and assembly processes. Every step is important to the finished product. That is why RF Industries tests 100% of all Low PIM products to assure the final product performs to our advertised standards. We use an E-Series PIM Analyzer, the latest factory test solution from Kaelus—formerly Summitek Instruments, the industry leader for PIM test equipment. Printed data is available for an added fee.





**W**ilitary and aerospace products today are expected to last longer and perform beyond their original design life. Due to funding issues, military programs are pushed out with many in service decades past their intended useful life. Manufactures of electrical components such as RF coaxial connectors no longer support the production of replacement parts or have gone out of business. Scrapping a multi-million dollar platform due to the lack of availability of a replacement

connector is not acceptable. Aviel Electronics, division of RF Industries, can provide a custom manufactured replacement for quantities as small as 1 piece.



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For additional information contact Hanh Luong at (877) 805-7381, (702) 739-8155, aviel@rfindustries.com or visit www.avielelectronics.com.

• USA manufacturing facility • Complete turnkey manufacturing • Design services • ITAR Registered Facility





### 4.1-9.5 (Mini) DIN to N added to our Low PIM adapter line

In addition to our 4.1-9.5 (Mini) DIN to 7-16 DIN adapters, are four new 4.1-9.5 (Mini) DIN to N type adapters. Essentially a compact version of the 7-16 DIN interface, the 4.1-9.5 DIN is used in some of the latest wireless site installations.

• Low PIM • Low VSWR • Non-tarnish white bronze (tri-metal) plating • 100% PIM tested



#### Ruggedized fiber jumpers ensure reliable wireless system performance

Most Wireless systems with remote radio head designs are installed outside, exposed to harsh environments that require ruggedized fiber-to-theantenna cabling for reliable performance. Our LC-LC duplex ruggedized fiber jumpers are IP66/67 rated harsh environment. The assembly is manufactured with Corning FREEDM® One cable and terminated with harsh environment connectors with strain reliefs that exceed 56 pounds of pull. Operating temperatures are  $-40^{\circ}$ to  $+70^{\circ}$  C. These harsh environment fiber optic jumpers are manufactured in New York by our Cables Unlimited division, a Corning Gold House.

For additional information contact Craig Catalano at (800) 590-9965, (631) 563-6363, quotes@cables-unlimited.com or visit www.cables-unlimited.com.





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### High Power 1/2 inch Corrugated Low PIM Cable Assemblies now available

High power 4G network installations require larger cable assemblies with Low PIM and low loss performance. RF Industries manufactures ½ inch assemblies with flexible and super-flexible corrugated cable. Applications include tower top jumpers and shelter/cabinet jumpers.

- Low PIM: less than -155dBc
- Low VSWR
- Terminated with 7-16 DIN and N connectors
- 100% PIM Tested



Super Flexible Corrugated

Flexible Corrugated

#### **Trivial Answer**



Cowboy stadium in Dallas (at this writing) holds the record with over 19,000 fans connected at one time during the Thanksgiving Day game against Oakland. The stadium has a Distributed Antenna System that is equivalent to 11 individual cell sites with 1,000 antennas inside and outside with about 26 miles of coaxial cable. The Wi-Fi system has 1,250 access points.

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Please contact us for more information on any product or service or for a distributor near you.

#### Visit Us at the Show



National Association of Tower Erectors Feb 24-27, San Diego (We will be walking the show. Contact us to visit and tour our San Diego headquarters.)



Above Ground Level Regional Conference March 20, Nashville



800-233-1728 fax: 858-549-6345