

# RFS introduces 700MHz PCP antenna for US carrier trial and commercial LTE network rollouts

Submitted by: Turtle Consulting Group

Monday, 20 April 2009

---

Las Vegas, 20 April 2009 - On the occasion of the 2009 NAB Show, RFS (Radio Frequency Systems), the wireless infrastructure and RF specialist, announces that it has developed a 700MHz version of its dual-feed circularly polarized UHF panel antenna series.

Released to critical acclaim in a 500MHz edition in the spring of 2008, when it was a world first, this 700MHz version is also a breakthrough, having also been specifically designed to support global circularly polarized communication applications.

The antenna, which also meets the precise requirements of Multiple Input, Multiple Output' (MIMO) applications technology for broadcast communications, gives installers access to superior RF performance and efficiency, and simplifies the rollout of MIMO networks.

"The unit's unveiling at this year's NAB show means that the new PCP700 panel antenna is perfectly timed for the plans of the North American broadcast industry to expand its transmission horizons as consumers migrate to the benefits of digital TV," said Charlie Williams, RFS' Principal Engineer, Antenna Development.

"Like the unit's 500MHz forebear, this highly advanced antenna features four horizontally polarized and four vertically polarized dipoles, and dual-input (two 2.5kW inputs) functionality, all in a compact and slim line unit," he added.

According to Williams, the PCP700's dual input allows a range of variously polarized signals to be broadcast from a single antenna.

Put simply, he says, the unit can produce circularly polarized signals, 'mixed' or elliptical signals, or independent vertically and horizontally polarized signals.

This gives broadcasters access to never-before-seen levels of flexibility, and the ability to transmit significantly more content from a single antenna system, he explained.

According to Williams, RFS' new PCP700 panel antenna is also ideal for data-intensive MIMO-based broadcasting applications.

MIMO-based applications, he says, normally require multiple antennas at both the source broadcast system and the destination receiver. The PCP700 panel, however, gives carriers access to this level of multi-antenna functionality at the source end, making it MIMO-ready for new services as they arrive in the marketplace.

As digital TV enters a new era in the US this summer, when the last of the analog TV transmitters are turned off, broadcasters will be looking to boost their in-fill and rural area coverage. This new PCP panel antenna gives infrastructure providers access to lower capex technology without compromising on coverage requirements.

At the transmitter tower top, the new PCP700 panel antenna saves on tower space and helps to minimize the tower loading, allowing carriers to counter environmental and site leasing issues.

At the same time, says Williams, carriers will have access to a revolutionary panel antenna system that beats the RF challenges that arise from co-locating two separate panel arrays under a single radome.

RFS, he explained, has developed an integrated antenna solution that boasts optimized input isolation and pattern polarization discrimination, as well as first-class VSWR (voltage standing wave ratio) performance.

Delving into the features on the new antenna reveals a high power-handling capability (up to 2.5kW per input) making it suitable for a very wide array of deployment scenarios, including the extension of terrestrial digital TV services into rural coverage areas, where many consumers will be able to enjoy real multi-channel choice for the very first time.

“Digital TV services will help to boost broadcaster revenues at a time of economic uncertainty. This new PCP panel antenna gives broadcasters access to a rapid and highly cost-effective transmission infrastructure that is a win-win solution on several fronts,” he said.

“RFS remains committed to offering the broadcast industry the best of all worlds when it comes to meeting their needs, as well as that of their viewers and the country as a whole during this period of great change. This antenna is just one component in our growing range of cost-effective broadcast and communications solutions to meet these needs,” he added.

RFS’ specialists on hand at the 2009 NAB Show (RFS booth # C2315) will include Raymond Bibisi, Sr. Director of National Area Sales for North America, and Mick Bennett, Global Product Manager, Broadcast & Defense.

=ENDS=

Photo: can be downloaded here:

[http://fs.turtleconsulting.co.uk/PICS/RFS0254PCP%20panel\\_2.jpg](http://fs.turtleconsulting.co.uk/PICS/RFS0254PCP%20panel_2.jpg)

Caption: RFS 700MHz PCP antenna for US carrier trial and commercial LTE network rollouts

Notes to Editors:

RFS Company background

Radio Frequency Systems (RFS) is a global designer and manufacturer of cable, antenna and tower systems, plus active and passive RF conditioning modules, providing total-package solutions for wireless infrastructure.

RFS serves OEMs, distributors, system integrators, operators and installers in the broadcast, wireless

communications, land-mobile and microwave market sectors. As an ISO compliant organization with manufacturing and customer service facilities that span the globe, RFS offers cutting-edge engineering capabilities, superior field support and innovative product design. RFS is a leader in wireless infrastructure.

For more information visit: <http://www.rfsworld.com/>

Trademarks: Radio Frequency Systems® and RFS® are registered trademarks of Radio Frequency Systems. All other trademarks are the property of their respective owners.

North America contact:

Paula Mennone-Preisner  
Marketing & Communication Specialist  
Radio Frequency Systems  
Pho: 203.630.3311 x.1809  
Mobile: 203.213.7454  
Email: [paula.mennone@rfsworld.com](mailto:paula.mennone@rfsworld.com)

Global contact:

Eric Mariette, VP Global Marketing & Strategy, Radio Frequency Systems  
Telephone: +33 1 5566 7395  
E-Mail: [eric.mariette@rfsworld.com](mailto:eric.mariette@rfsworld.com)

Media contacts:

Jo Gottschalk  
Turtle Consulting Group UK  
Tel: + 44 70 74 707 081  
Email: [jgottschalk@turtleconsulting.com](mailto:jgottschalk@turtleconsulting.com)

Elaine Witteridge  
Turtle Consulting Group UK  
Tel: + 44 70 74 707 062  
Email: [ewitteridge@turtleconsulting.com](mailto:ewitteridge@turtleconsulting.com)

Jackie Thomas  
Turtle Consulting Group Asia Pacific  
Tel: + 64 2737 57 461  
Email: [jthomas@turtleconsulting.com](mailto:jthomas@turtleconsulting.com)