



Client › GrassAds

The Challenge:

Help GrassAds enhance the wireless communication between its painting robots and control systems for better quality performance in highly congested areas.

The Solution:

Incorporate the Lantronix PremierWave® EN, which uses 802.11 a/b/g/n with a selectable dual band radio, to boost signal strength.

The Result:

GrassAds' next-generation robotic technology offers new and exciting options for its clients in terms of advertising image size and creative content, and has opened up new markets for the company.

“We were looking at forking out a lot of money for a custom solution at one stage. The PremierWave EN saved us significant cost and time.”

Zachary Halls,
Electronics Engineer

The Challenge: Boosting Connectivity Strength for Bigger Impressions

From corporate golf days to international sporting events, grass advertising provides a unique opportunity for businesses to gain a competitive advantage. In the past, the grass signage industry used manufactured stencils to lay down advertiser logos on sports fields, but these were expensive and lacked flexibility.

Five years ago, engineers at Queensland-based GrassAds Pty Ltd combined their knowledge of various industries and skills to create a more affordable way to apply grass advertising. Using proprietary software, digital images are wirelessly communicated to an autonomous robot (GrassAds' "Logobot"), which drives around the field, recreating the image directly onto the grass. Once the robot has drawn the outlines, company personnel paint within the lines.

GrassAds' robotic technology was originally designed using the Lantronix WiPort® device server to enable the wireless connection between the robot and its control and positioning systems. When GrassAds began working in larger stadiums, interference issues arose due to the huge amount of wireless activity in use in these facilities. GrassAds' engineers recognized that the wireless connection needed a boost and began investigating various options.

The Solution: The Lantronix PremierWave EN Provides the Muscle

Having worked with Lantronix in the past, GrassAds' engineers felt that the most logical solution was to test out the PremierWave EN Embedded Linux Wireless Application Server. According to electronics engineer Zachary Halls, "Because the PremierWave EN has 802.11 a/b/g/n—as compared to the WiPort's 802.11 b/g—it was a simple and easy way to expand the range of the WiPort."

Like the WiPort, PremierWave EN takes the complexity out of RF design and networking, allowing OEMs to minimize engineering risk, shorten development time and reduce development cost. "The PremierWave EN was an easy fix to our connectivity issues, and it saved us significant cost and time," says Halls. "But the biggest advantage of going with the PremierWave EN was dealing with the people at Lantronix. They made recommendations for the current WiPort-based system that significantly improved the performance of our system as a whole."

The Results: A Stronger Showing in Domestic AND International Markets

GrassAds' upgraded robot can accurately create images of any size or complexity. Customers can now take advantage of new capabilities, such as the ability to frequently change logos or create advertising at racetracks, airports and other hard surface areas. In addition, GrassAds can offer the same grass signage services that it provides to national clients—like NRL, AFL, cricket and rugby unions—to smaller businesses and work at any venue, including stadiums, sports complexes, schools, race tracks and more.

GrassAds has been successful in gaining a large market share in Australia within the grass signage industry and has completed high profile work in both the U.K. and the U.S. One such promotion was for Gillette in London, which featured an image of Roger Federer that covered an entire rugby field. Looking to the future, Halls can say with confidence that Lantronix will be a part of future enhancements to the robotic grass advertising system.

About GrassAds Inc.

Queensland-based GrassAds Pty Ltd is a mechatronics company that uses robotic technology to deliver affordable creativity in grass advertising. More cost effective and stylized than traditional grass advertising techniques, GrassAds' technology allows numerous sponsors to inexpensively change logos weekly and offers unlimited options in size and creative content to its clients. The company has developed and proven this patented robotic technology in the Australian market and it is now developing its international capability.

For more information, visit www.GrassAds.com.

For more information on the Lantronix PremierWave EN, visit <http://www.lantronix.com/premierwave-en>

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