

# Application Brochure



# Cellular Backhaul Solutions

## Reaching Out to Rural Areas

The demand for broadband communications in rural areas continues to grow rapidly. However, rural obstacles such as low user density, vast geography and the absence of affordable Telco infrastructures render such areas particularly problematic for cellular operators. As a result, a potentially enormous market is left underserved.

With backhaul expenses representing a significant chunk of network costs, a low cost, high capacity, easy to install backhaul solution could provide the answer to the rural market challenge.

RADWIN's instantly deployable, field proven, low CAPEX/OPEX wireless backhaul solutions transcend all known rural obstacles, successfully delivering robust, reliable cellular backhaul to remote areas and significantly expanding network reach.

By delivering native TDM & Ethernet over a single wireless link, RADWIN's Sub-6GHz solutions enable operators to connect entire communities to next generation services and as a result profit from the rural revenue opportunity.









# 46 The installation was easy and fast, and connectivity was very easily achieved even in a difficult 5.8GHz band where the spectrum is very tight. We have had zero dropped packets since turning the site on and couldn't be more impressed with RADWIN 2000's performance. 39

Kevin Kluge, Director of Network Planning, Bug Tussel, Rural Wireless Carrier, USA

## Cost-Effective, High Capacity Wireless Cellular Backhaul for Rural Areas

RADWIN enables rural communications via backhaul solutions that are:

#### Easy to Install & Maintain

Fast installation and simple maintenance eliminates high installation costs and complex training processes while enabling rapid network ramp-up and operations.

#### Robust & Field Proven

Durable, reliable technology enables high quality service and coverage over all terrains and topographies.

#### Wireless & License Free

Wireless license-free technology eliminates recurrent leased-line expenditures and license fees, enabling low-cost communications ideal for low density areas.

#### High in Quality, Vast in Geography

High transmission power and long range technology provide extensive geographical coverage. Advanced MIMO and OFDM technologies together with field-proven air interface enables optimal performance in sub-6GHz bands.

#### **Next-Generation Ready**

TDM & Ethernet communications over a single wireless link enable seamless migration to 3G/4G for increased next-generation data service revenues.



# Cellular Backhaul





Cellular backhaul in rural Wisconsin

## Field Proven, Point-to-Point Sub-6GHz Backhaul Solution

- High capacity up to 100 Mbps @ 20 MHz
- Native TDM + Ethernet on 1 platform (up to 16 E1s/T1s)
- Long range up to 120 Km/75 miles
- Built-in advanced technologies: OFDM, MIMO & Diversity
- 1+1 support ensures carrier-grade reliability
- One platform, multiple frequency bands
- Simple installation
- Carrier-class performance at most competitive price in industry



Backhaul with RADWIN to Rural Areas



## Cellular Backhaul Portfolio



### RADWIN 2000 High-Capacity Backhaul Solution

RADWIN 2000 is a high-capacity TDM and Ethernet backhaul solution tailored to meet the needs of carriers and service providers. RADWIN 2000 provides 100 Mbps net throughput with a combination of Ethernet and up to 16 E1s/T1s as well as an extended range of up to 120 km/75 miles. The solution combines advanced OFDM and MIMO technologies with RADWIN's exceptionally robust air interface. With unparalleled performance and easy installation and maintenance, RADWIN 2000 supports multiple frequency bands on a single platform and suits a variety of different topologies and environments.



## WinLink™ 1000 Medium-Capacity Backhaul Solution

WinLink 1000 offers carriers and service providers a comprehensive carrier-class, medium capacity backhaul solution for both TDM and Ethernet traffic. An economic solution for connecting areas with low user density, WinLink 1000 is highly reliable, and offers superior ease of installation and maintenance at a competitive price. Delivering up to 36 Mbps net throughput and up to 4 E1s/T1s at a range of up to 80 km/50 miles, WinLink 1000 is available in various Sub-6GHz frequency bands, and is currently deployed in over 110 countries around the world.

allowed us to extend our network to provide broadband to towns and villages that have been overlooked by other players. The affordability of the RADWIN solutions and the ease and speed with which they are deployed enable us to capture market share and create a true competitive advantage. 39

Don Derksen, CEO, WiFi4All, ISP, the Netherlands



4Gon www.4Gon.co.uk info@4gon.co.uk Tel: +44 (0)1245 808295 Fax: +44 (0)1245 808299