



## Case Study - Rural Telephone Cooperative Upgrades Infrastructure



*"We are pleased with the Redline equipment recently installed in our network. It is a great solution for Mid-Plains because it provided an economical way to cross otherwise impenetrable terrain over 800 feet deep. We are using the equipment to provide service to a community that is 27 miles away by air, but is over 50 miles away by road. The Redline solution allowed us to avoid the costs of leasing T1s from other companies. Redline and CSSA provided excellent support throughout the entire project. This project would not have happened without CSSA's expertise and market knowledge and Redline's affordable wireless solution."*

**- Paul Swanson, Plant Superintendent, Mid-Plains Rural Telephone Cooperative**

### **Redline's AN-30e system helps Mid-Plains Rural Telephone Cooperative to upgrade its high-speed Internet services at a fraction of the cost of wired technologies**

#### **Problem:**

- A rural USA telephone cooperative needed to upgrade its infrastructure between its Cleta and Goodnight exchanges to increase bandwidth for its Internet services.
- Rough terrain over the 27 miles between the two exchanges made it difficult and expensive to install new fiber or copper.

#### **Solution:**

- CSSA, a provider of network planning and installation services and a Redline Partner, recommended using Redline's broadband wireless equipment.
- The company installed a network of Redline AN-30e's that easily covers the 27-mile distance over rough terrain, to connect the Cleta and Goodnight exchanges.

#### **Result:**

- Using Redline's AN-30e broadband wireless equipment, the Mid-Plains Rural Telephone Cooperative saved approximately 75% compared to the cost of installing a fiber network.
- By deploying its own system, the cooperative has reduced operating expenses by eliminating the need to lease T1s from other companies.
- The network now delivers the equivalent of four T1s, enabling the company to deliver advanced services to its subscribers, and to expand to a total of eight T1's on each AN-30e.



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## Redline Product Family (Pre-WiMAX)

### AN-50e



Redline's award-winning AN-50e is the world's first high-performance, low-cost multi-service solution for carriers and service providers looking to expand their networks and provide high quality access to customers. Operating in the 5.4 and 5.8 GHz unlicensed bands, Redline's AN-50e delivers an industry-leading 49 Mbps and supports long-range links exceeding 80 km (50 mi) in clear line of sight (LOS) conditions. The AN-50e provides cost-effective site-to-site connectivity for demanding PTP and PMP applications including transparent LANs and VoIP.

### Superior Support

When you choose Redline, you receive the easiest solution to install and manage, and the best customer support in the industry. We meet our global commitments by selling through our fully qualified partners - professionals who meet our rigorous requirements for world-class service and support. All Redline partners are fully committed to customer satisfaction and are supported by our series of structured service programs and stringent quality and efficiency requirements.

### AN-30e



The AN-30e is a carrier-grade TDM backhaul solution for mobility network and enterprise network operators. Operating in the 5.4 and 5.8 GHz unlicensed bands, the system is capable of long-range links exceeding 80 km (50 mi) in clear LOS conditions. Redline's proven AN-30e system is the ideal platform for migration to VoIP capable of supporting up to eight T1/E1 circuits and mixed TDM/IP traffic applications. Enterprise operators and MUSH can benefit by using the AN-30e as an inexpensive alternative to leasing circuits and installing new wired services.

### AN-100



Redline's award-winning AN-100, the world's first 802.16 compliant product, provides a scalable carrier-class broadband wireless solution for backhaul and access applications. Operating in the 3.5 GHz licensed bands, the built-in optical and non LOS technology overcomes typical urban obstacles such as trees and buildings. Use this low latency system to provide reliable delivery of delay sensitive services - circuit switched voice traffic, voice-over-IP (VoIP), optimized transport for video, and prioritized data traffic - all converged over a single subscriber link.



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