



## Case Study - Overcoming line-of-sight challenges

### Redline's AN-50e enables BPS Telephone to overcome line-of-sight challenges and expand its broadband network area



*"We moved all traffic off the T1 and are carrying all data over our Redline links. The main advantage of the Redline link over the T1 is that I now have a place to build a network at both ends plus two locations in the middle. In other words, I now have the ability to provide access at four locations instead of just two. We are paying about the same as a point-to-point T1 in recurring fees for all our towers, but we have many times the available bandwidth for that cost, as well as the midpoints."*

**- Butch Evans, BPS Telephone**

#### Problem:

- Bernie, Missouri-based BPS Telephone needed to expand the reach of its broadband network to customers beyond its existing wired telecommunications infrastructure.
- The rural environment presented many line-of-sight barriers, which poses a significant challenge to deploying multiple wired and wireless broadband systems.
- BPS Telephone needed a system that it could expand quickly and easily to reach new customers as the demand for broadband services increased.

#### Solution:

- BPS Telephone chose Redline's AN-50e broadband wireless systems, which provided BPS with the speed, range and scalability it needed, and overcame the line-of-sight constraints.
- BPS eliminated its T1 connection and installed four Redline AN-50e's, with one at each end of its network and two in the middle. BPS can provide access from each AN-50e location.
- Redline's AN-50e delivers an industry-leading 72 Mbps throughput over-the-air, supports long-range links and delivers site-to-site connectivity for point-to-point and point-to-multipoint applications.

#### Result:

- BPS now has a cost-effective, more flexible and higher performing infrastructure that has allowed the company to expand access to more locations and customers than ever before.
- BPS now has four locations, each generating revenue, for what it would have cost for just one T1 connection.



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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.



SuperQuest Award Winner



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