Frequently Asked Questions: AN-30e

Q: What is the AN-30e

A: Redline's AN-30e is a technology leading wireless broadband solution that provides carrier-grade performance in challenging non-line-of-sight environments for mixed IP and TDM traffic streams. Operating in the unlicensed 5.4 and 5.8 GHz bands, the AN-30e's groundbreaking OFDM technology provides unparalleled access even in challenging environments and supports connectivity for one to eight TDM links.

Q: Who would benefit from the AN-30e?

A: The AN-30e is a reliable, cost effective backhaul solution for cellular and mobile carriers, and for enterprise network operators requiring a combination of IP applications and T1/E1 circuits as an alternative to expensive leased lines.

Q: How are customers using the AN-30e?

A: Redline's AN-30e is ideally suited for a variety of backhaul, and private network applications. The following applications are supported:

- Backhaul for carriers, cellular/mobility operators, ISPs and WISPs
- A cost-effective alternative to leased circuits for enterprise customers
- Building-to-building connectivity for enterprise customers with a combination of high demand IP applications (transparent LANs and VoIP) and T1/E1 circuits for their PBX
- Migration path from TDM services to VoIP
- Disaster recovery, Redundant Networks
- Remote Storage and Mirroring
- Video conferencing and video surveillance
- Private networks for military and security applications
- Cost-effective access for MTU (multi tenant units), MBU (multi business units), MDU (multi dwelling units)
- Private networks for schools, utilities and municipalities

Q: Why is the AN-30e a superior wireless broadband solution?

A: Redline's AN-30e features an unmatched combination of capacity, range, reliability and security for the delivery of mixed IP and TDM traffic. Plus, when you choose the AN-30e, you receive the easiest solution to install and manage, with the best customer support in the industry.

Q: What is the range of the AN-30e?

A: Redline's AN-30e provides its customers with superior range to enable remote locations to be connected, and reduce the cost of multiple links. The AN-30e can provide a range of over 80km/50mi in line of sight and over 18km/10mi in optical line of sight environments. Plus, the AN-30e's industry leading OFDM technology provides superior non-line-of-sight operation even in challenging environments.

Q: How much capacity can the AN-30e deliver?

A: The AN-30e can provide up to 72 Mbps over the air (coded) or approximately 48 Mbps at the Ethernet port. Or the AN-30e can provide connectivity of up to eight T1/E1 links.

Q: How robust and reliable is the AN-30e?

A: The AN-30e delivers high capacity at a bit error rate (BER) performance of 10^{-9} (PER of 10^{-6}) with a 99.999% link availability. The AN-30e reaches this performance level through the use of a dynamic adaptive modulation algorithm that enables it to deliver eight different modulation speeds (from BPSK to 64QAM). Plus, The AN-30e's patented ARQ (Automatic Repeat Request) algorithm in conjunction with advanced forward error correction techniques enables the AN-30e system to offer a 99.999% link availability.

Q: How secure is the AN-30e?

A: The AN-30e features a 64-bit private key encryption scheme to provide enhanced over-the-air security.

Q: Can the AN-30e support VoIP and other real time applications?

A: Yes, the AN-30e is essentially a layer two device, making it transparent to all higher layer applications, including VoIP. Plus, the AN-30e's low latency of 5-10 ms and its ability to maintain QoS, over the wireless link, makes it ideally suited to time-sensitive traffic streams like VoIP, video and interactive applications. This low latency also makes the AN-30e perfect for backhaul and multi-hop backhaul, as well.

Q: Do you support mobility backhaul, i.e. T1/E1s?

A: Yes, the AN-30e offers connectivity for one to eight, full and fractional (nx64) TDM links and the simultaneous transport of mixed IP and TDM traffic streams. This makes the AN-30e ideal for preserving legacy TDM services while migrating to VoIP.

Q: What technological innovations are incorporated into the AN-30e?

A: The AN-30e incorporates Redline's 10 patented enhancements to technologies that are necessary for the development of long-range, high-capacity, robust non-line-of-sight solutions: OFDM (orthogonal frequency division multiplexing), MAC (media access control) and RF (radio frequency)/antenna design. Because of Redline's technological advances, no other company can match the AN-30e's performance in all three parameters in a single product.

Q: How does OFDM work?

A: OFDM achieves its high data rate and efficiency by using several overlapping carrier waves instead of just one. By using multiple carriers to transport data, communication is still maintained should one or more carriers be affected by propagation anomalies like multipath interference.

Q: How easy is it to install the AN-30e?

A: Because of its advanced performance and an innovative split design, Redline's AN-30e is easier and less expensive to install, maintain and manage. The AN-30e's split architecture places the transceiver up beside the antenna, eliminating cable losses, and enabling low cost cables and small antennas to be used. Antenna alignment is faster with the AN-30e since it uses smaller antennas, which are easier to align. In addition, an audible receive strength indicator provides rapid feedback on antenna alignment. Finally, because of the AN-30e's robust performance, it can be placed in convenient, inexpensive locations like building rooftops and small towers.

Q: What management and configurations tools does the AN-30e offer?

A: The AN-30e can be configured using Redline's SNMP-based RedAccess Network Management System, or through Telnet, console port, CLI SNMP and a Web-based Graphical User Interface.

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Q: Where can I buy the AN-30e?

A: In order to service a global marketplace across a diverse range of broadband wireless applications, Redline Communications sells the AN-30e solely through a global network of distributors, VARS and system integrators. To find a Redline Partner in your area, contact sales@redlinecommunications.com or call + 1 905 479-8344.

Q: How can I become a Redline Partner?

A: For information on how to become a Redline Partner, visit www.redlinecommunications.com or contact Redline at partners@redlinecommunications.com