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# **AN-50e** Broadband Wireless System

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## AN-50e features:

- Up to 72 Mbps raw 49 Mbps net Ethernet throughput
- Lowest end-to-end latency in its class
- Dynamic time division duplex (TDD) transmission
- Bi-directional dynamic adaptive modulation
- PMP 802.1Q VLAN Support
- Redundant AC/DC
  Power Supplies
- DFS and ATPC

Redline's award-winning AN-50e is the world's first high-performance, low-cost multi-service backhaul and specialized access solution for carriers and service providers looking to expand their networks and provide high quality access to customers.

Operating in the 5.4 GHz and 5.8 GHz unlicensed bands, Redline's groundbreaking OFDM technology delivers an industry-leading 72 Mbps and supports long-range operations of over 80 km (50 mi) in clear line of sight (LOS) conditions. For both point-to-point (PTP) and point-to-multipoint (PMP) applications, the carrier-grade AN-50e system employs advanced technologies to address inter-cell interference, non LOS deployments, and over-the-water applications.

Redline's AN-50e provides cost-effective site-to-site connectivity for demanding applications including transparent LAN, VoIP, and high-quality video streaming. Enterprise customers, municipalities, schools, and hospitals can add new multi-service access where costs for traditional wired services would be significantly prohibitive. The long-range capability provides wireless connectivity between widely dispersed locations using a minimum number of repeater stations.

The AN-50e is fully supported by RedAccess, Redline's full-featured carrier-class Network Management System (NMS). Use RedAccess to manage Redline's BFW products and achieve maximum performance from your wireless system.

High throughput, long range, and low cost installation make the AN-50e your compelling choice for expanding your wireless networking services.

## **Industry Leading Broadband Wireless Solutions**

Redline products deliver an unmatched combination of range, capacity, security, and reliability, even in very challenging environments. Best-in-class data rates and spectral efficiencies conserve valuable spectrum and reduce the costs of providing high-performance access. Redline's technology advantage includes several patents necessary for building the OFDM-based wireless broadband systems that deliver our characteristically robust, extreme-distance/high-bandwidth performance. With built-in security encryption, and many other advantages, Redline products provide the reliability you need to grow your systems into the future.



Leading the WiMAX Revolution



SUPERQuest award: "Most Promising Network Transport Technology"



## **AN-50e System Specifications**

System Capability:	LOS, optical-LOS, and non-LOS (OFDM)	Dynamic Channel Control:	DFS, ATPC
RF Band:	5.470-5.850 GHz, TDD	MAC:	PTP, PMP, concatenation/
Channel Size:	20 MHz (5 MHz steps)		fragmentation <sup>2</sup> , ARQ
Data Rate:	Up to 49 Mbps average Ethernet rate	Range:	Beyond 80 km (50 mi) LOS
Max TX Power:	20 dBm (region specific)		@ 48 dBm EIRP
Rx Sensitivity:	-86 dBm @ 6 Mbps (BER of 1x10e-9)	Network Connection:	10/100 Ethernet (RJ-45)
IF Cable:	Up to 228 m (750 ft)	System Configuration:	HTTP (Web) interface, SNMP,
Network Attributes:	Transparent bridge, automatic link		CLI, console (RS-232)
	distance ranging <sup>1</sup> , 802.3x <sup>1</sup> , 802.1g <sup>1</sup> ,	Network Management:	SNMP: standard/proprietary MIBs
	DHCP pass-through, 802.1Q VLAN <sup>2</sup> ,	Power:	110-240 VAC 50/60 Hz,
	encryption		18-72 VDC, dual
Modulation:	BPSK to 64 QAM (bidirectional dynamic adaptive) <sup>1</sup>	Compliance:	EN 60950, EN 301 893, EN 301 390,
			EN 301 489-1 & 17, FCC part 15

<sup>1</sup>Point-to-Point Mode only, <sup>2</sup>Point-to-Multipoint mode only

## **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.

## **Ease of Installation and Management**

Redline products are easier and less expensive to install, maintain, and manage. The split architecture places the transceiver beside the antenna - eliminating cable losses, and enabling the use of low cost cables and small, easy to align antennas. Redline products can maintain a reliable link in challenging environments, allowing antennas to be placed in convenient locations such as building rooftops and small towers. This minimizes installation costs and reduces location rentals.

## **About Redline Communications**

Redline Communications is a technology leader in the design and manufacture of standards-based broadband wireless access solutions. Using industry leading OFDM technologies, Redline's award-winning products provide unmatched high-capacity non line-of-sight capabilities with proven performance, reliability and security. Ideal for a variety of access, backhaul and private network applications, Redline products are meeting the needs of carriers, service providers and enterprises worldwide. Redline has over 15,000 installations in 75 countries across six continents through a global distribution network of 80+ partners.

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