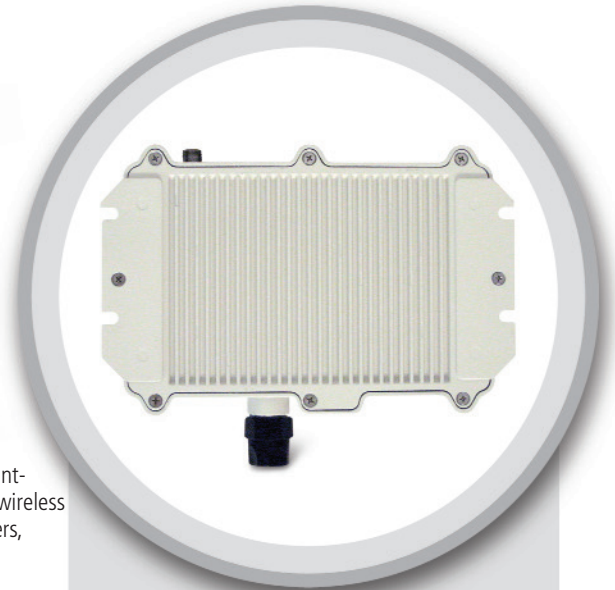


AN-80i

Advanced Broadband Wireless Infrastructure Solution



The AN-80i broadband wireless radio provides high capacity, long range point-to-point and point-multipoint communications links wherever needed. Chosen for its ability to deliver a seamless wireless experience in complex applications, the AN 80i is used throughout the world by service providers, governments, oil and gas industry, utilities, and military organizations.

Powered by Redline's, innovative third generation Orthogonal Frequency Division Multiplexing (OFDM) technology, the AN-80i radio is an IEEE 802.16 standards based design with powerful hardware accelerators that achieves the highest throughput, lowest latency and the greatest line-of-sight (LOS) and non-line-of-sight (NLOS) range in the industry even in the most challenging urban and industrial environments.

Available in the 3.5 GHz WiMAX band, the licensed 4.9 GHz public safety band or the 5.4 GHz – 5.8 GHz license exempt band, the AN-80i is configured via firmware options and throughput keys so you can purchase the features and throughput performance you need today between and upgrade later without having to replace any hardware. This common radio hardware approach reduces your spares requirement while providing a high level of future proofing via new firmware loads for updates and new features.

In the PTP configuration the AN-80i delivers over 100 Mbps Ethernet data rate— more than double the nearest competitor making it the ideal choice for high capacity backhaul applications. It has excellent range and is deployed in hundreds of links over 50 kms. In the PMP configuration, the AN-80i delivers over 50 Mbps Ethernet data rate, the highest in its class and it supports a full range of Quality of Service (QoS) controls to enable premium access services for voice, data and video services. Its industry leading capacity also supports the maximum number of video cameras with the highest video quality. With either configuration, you're assured of the ultra low latency - as low as 1 msec - up to 40 times lower versus the competition.

It provides AES-128 and AES-256 encryption, and X.509 certificate based authentication, and as the only broadband wireless solution to achieve FIPS 140-2 certification, the AN-80i delivers unparalleled security.

Designed to meet stringent carrier-class requirements, HALT accelerated life tested and with an IP67 (submersible) rated outdoor enclosure the AN-80i delivers industry-leading 29-year Mean Time Between Failures (MTBF) and the industry's lowest documented field failure rate, makes the AN-80i the perfect choice for mission critical deployments.

Available with a wide variety of antennas, the AN-80i includes an audible antenna alignment indicator, alignment mode GUI display and a built-in spectrum analyzer function for quick and simple installation. The product is manageable Over the Air (OTA) via a standard Web browser or through the Redline Management System (RMS), Redline's powerful, SNMP based element management system.

The unmatched capabilities of the AN-80i make it the ideal solution for broadband wireless backhaul and access applications where performance, security and reliability are paramount.

Features:

- Operates in 3.5 GHz WiMAX band, 4.9 GHz public safety band and license-exempt 5.4 and 5.8 GHz bands
- Industry leading throughput – 90 Mbps Ethernet PTO, 48 Mbps Ethernet PMP
- Exceptional long-range capabilities
- Highest capacity point-to-multipoint system in the industry
- Lowest end-to-end latency in its class
- Flexible channel size and speed selections
- QoS controls to segment and prioritize traffic groups
- Common hardware platform reduces spares
- Dynamic time division duplex (TDD) transmission
- Easy install with IEEE 802.3af PoE

Industry-Leading Broadband Wireless Solutions

Redline solutions deliver an unmatched combination of range, capacity, security, and reliability, even under the most challenging environmental conditions. Redline's best-in-class data rates and spectral efficiencies conserve valuable spectrum and reduce the cost of providing high-performance access. Redline solutions combine built-in security encryption with robust, extreme distance / high-bandwidth performance to deliver products that provide the reliability network operators and carriers need to grow their systems into the future.

AN-80i System Specifications

System Capability:	LOS, optical-LOS, and non-LOS (OFDM)
RF Band:	3.300 – 3.800 GHz ¹ , TDD WiMAX licensed band 4.940 – 4.990 GHz ¹ , TDD licensed Public Safety band 5.470-5.725 GHz ¹ , TDD unlicensed band 5.725-5.850 GHz ¹ , TDD unlicensed band
Channel Size:	5, 10, 20, 40 MHz ¹ (software selectable)
Data Rate:	PTP - Up to 108 Mbps (uncoded burst rate), PMP - Up to 54 Mbps (uncoded burst rate)
Network Attributes:	PTP - Transparent bridge, automatic link distance ranging, 802.3x, 802.1p, DHCP pass-through PMP - Transparent bridge, automatic link distance ranging, DHCP pass-through, 802.1Q VLAN, CIR, PIR support
Modulation:	PTP -BPSK to 64 QAM bidirectional dynamic adaptive PMP - BPSK to 64 QAM
MAC:	PTP - concatenation, ARQ PMP - concatenation, TDMA fragmentation, ARQ
Over the Air Encryption:	PTP - Proprietary private key encryption AES-128 and AES-256 options

Dynamic Channel Control:	PTP - DFS, ATPC PMP - DFS
Max Tx Power:	+25 dBm (region specific)
Rx Sensitivity:	-85 dBm @ 3 Mbps max.
PoE Cable:	Up to 91m (300 ft)
Network Connection:	10/100 Ethernet (RJ-45)
System Configuration:	HTTP (Web) interface, SNMPv2, Telnet
Element Management:	RMS platform support
Operating Temp:	-40 to 60 degrees celcius
Power Consumption:	Standard IEEE 802.3af (15.4 W Max.)
Power Supply:	110/220/240 VAC 50/60 Hz 18-60 VDC
Compliance:	IEC, EN, and UL/CSA 60950 EN 301 489-1, EN 301 489-17 5.8 GHz Industry Canada RSS 210, FCC part 15, ETSI EN 302 502; 5.4 GHz Industry Canada RSS 210, RSS 111, FCC part 15, ETSI EN 301 893, FCC part 90 Industry Canada RSS 192, FCC part 90, ETSI EN 302 326-2
Dimensions:	11.38" L X 7.50" W X 2.03" H, 28.9cm L X 19.0cm W X 5.15cm H
Weight:	4.5 lbs, 2.0 kg

1. Availability restricted by regional regulations

About Redline Communications

Redline Communications is the leading provider of advanced broadband wireless solutions. Redline's award-winning broadband wireless products enable network operators to cost-effectively support high bandwidth communications, including voice, video, and data communications. Redline is committed to maintaining its wireless industry leadership with the continued development of advanced wireless broadband products. Redline's experience and expertise helps service providers, utilities, oil and gas, government, military organizations and more roll out wireless broadband networks to support their specific communications requirements.

