RedMAX™

*Proven Family of WiMAX Forum Certified™ Solutions
for Fixed and Nomadic Services*

RedMAX Subscriber Unit (SU-I)

Features:

- 200 MHz operation from 3.3–3.5; 3.4–3.6; and 3.6–3.8 GHz

- 802.16-2004-compliant

- Subscriber self-installation

- Low latency

- Intel® PRO/Wireless

- LED signal strength indicators for easy antenna alignment

- High gain integrated antenna

- SMA Interface for operation with non-integrated antennas

- 24 dBm Max Tx Power

- Dynamic QoS settings

Redline's RedMAX™ Indoor Subscriber Unit (SU-I) is designed to deliver reliable, cost-effective, high-bandwidth broadband wireless connectivity. As a leader in WiMAX Forum Certified® products, Redline has designed its RedMAX SU-I to comply with the IEEE 802.16d standards, bringing true WiMAX performance to end-users.

The RedMAX SU-I is easy and economical to deploy, allowing service providers to quickly provision new service offerings with bandwidth comparable to or greater than xDSL or cable. Simple subscriber self-installation and an integrated antenna with signal strength LEDs for quick setup, make the RedMAX SU-I an ideal solution for both enterprise and residential applications.

Operating in several RF bands, Redline's integrated 3rd generation, Orthogonal Frequency Division Multiplexing (OFDM) non-Line-of-Sight (NLOS) technology helps overcome typical urban obstacles such as trees and buildings while maintaining high reliability. Stringent design standards and sophisticated techniques, including advanced forward error correction (FEC), combine to deliver wireline-equivalent high availability.

The very low latency of Redline's RedMAX SU-I ensures reliable delivery of delay-sensitive services such as video, voice-over-IP (VoIP), and prioritized data traffic. The RedMAX SU-I supports VoIP interfaces to deliver toll-quality voice and data traffic with service level agreements and guaranteed Quality of Service (QoS).

WiMAX-based compatibility, high performance, and ease of installation all combine to make the RedMAX SU-I the best choice for cost-effectively delivering wireless broadband services to business and residential access markets.

RedMAX Subscriber Unit (SU-I) System Specifications

System Capability:	Non-LOS
	Cellular-based Point-to-Multipoint
RF Band:	3.3-3.5; 3.4-3.6; and 3.6-3.8 GHz
Channel Size:	3.5 MHz, 7 MHz
Spectral Efficiency:	Up to 5 bps/Hz (over the air)
	Up to 3 bps/Hz (net to Ethernet)
Over The Air Rate:	Up to 35 Mbps (@7 MHz, rates depend on channel size)
Ethernet Data Rate:	Up to 23 Mbps (@7 MHz)
Maximum Tx Power:	Up to +24 dBm (region specific)
Rx Sensitivity:	Better than -98 dBm @ BPSK 1/2
	(based on BER of 1x10e-6)
Network Attributes:	Transparent bridge
	802.1p, 802.1Q VLAN port tagging
	802.1Q, TOS/DSCP and L2/L3 address, traffic classification
Modulation/Coding Rates:	Auto select: BPSK, QPSK, 16 QAM, 64 QAM
Coding Rates:	1/2, 3/4 and 2/3
Over the Air Encryption:	DES, 3DES, RSA
MAC:	802.16-2004 compliant PMP
	802.16-2004 packet convergence sub-layer mode
	TDMA access
Duplex Technique:	TDD (time division duplex)
	HD-FDD (Half Duplex Frequency Division Duplex)*
Wireless Transmission (PHY):	256 FFT Orthogonal Frequency Division Multiplexing (OFDM)
Network Connections:	10/100 Ethernet (RJ-45)
System Configuration:	SNMP, FTP, TFTP*
Network Management:	SNMP, standard and proprietary MIBs
	Full management by Redline Management
	Suite (RMS)
Available Power Blocks:	Auto-sensing 110/220/240 VAC 50/60 Hz
Compliance:	EMC: EN 301 489-1, EN 301 489-4, EN 55022/CISPR 22
	RF: EN 301 021, EN 301 753, Industry Canada: RSS-192
	Safety: IEC 60950-1, EN 60950-1, UL 60950-1
Operating Temperature:	-5 C to 40 C
Antenna:	Integrated antenna 10.5 dBi

SU-I with optional window mount

Voice Interface Option – **VoIP:** SIP; **POTS:** 2 FXO/FXS

*Contact sales for availability / approvals in your region

About Redline Communications

Redline Communications is the leading provider of fixed and mobile standards-based wireless broadband solutions. Redline's RedMAX™ WiMAX Forum Certified™ system, RedMAX 4C Mobile WiMAX™ products, and its award-winning broadband wireless infrastructure family of products – RedCONNEX™ and RedACCESS™ – enable service providers and other network operators to cost-effectively deliver high-bandwidth services, including voice, video and data communications. Redline is committed to maintaining its wireless industry leadership with the continued development of WiMAX and other advanced wireless broadband products. With more than 75,000 installations in 80 countries, and a global network of over 140 partners, Redline's experience and expertise helps service providers, enterprises and government organizations roll out wireless broadband networks to support advanced communications.