



RedMAX Subscriber Unit (SU-I)



Features:

- WiMAX Forum Certified™ design
- Intel® PRO/Wireless 5116
- Self Install
- Non-LOS PMP capability employing OFDM technology for high reliability
- Dynamic Quality of Service (QoS) settings
- 3.4 - 3.6 GHz frequency band

The RedMAX SU-I is an indoor broadband wireless subscriber access product designed to WiMAX Forum Certified™ specifications. Compliance to the IEEE 802.16-2004 standard ensures interoperability (as defined by the WiMAX Forum™) with an emerging industry-wide base of compatible Point to Multipoint (PMP) equipment.

The RedMAX SU-I system is easy and economical to deploy, allowing service providers to quickly provision new services with bandwidth comparable to xDSL. The RedMAX SU-I self install indoor unit, with fully integrated antenna, includes an LED installation tool for quick and simple alignment.

Operating in the 3.4 - 3.6 GHz band, 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 mission critical services such as circuit-switched voice traffic, video, voice-over-IP (VoIP), and prioritized data traffic. WiMAX-based compatibility, high performance, and easy installation all combine to make the unit an excellent choice when deploying wireless broadband for business and PMP residential access.

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System Capability:	Non-LOS Cell-based Point-to-Multipoint	Network Connections:	10/100 Ethernet (RJ-45)
RF Band:	3.400 GHz to 3.600 GHz (FWA Band)	System Configuration:	HTTP (Web) interface, SNMP, TFTP
Center Frequency Steps:	250 KHz	Network Management:	SNMP, standard and proprietary MIBs Full management by RedAccess NMS
Channel Size:	3.5 MHz, 7 MHz	Available Power Blocks:	Auto-sensing 110/220/240 VAC 50/60 Hz
Spectral Efficiency:	Up to 5 bps/Hz (over the air) Up to 3 bps/Hz (net to Ethernet)	Compliance:	EN 35022, FCC part 15 subpart B, EN 53024, EN 301 021, EN 301 489, UL 950, IEC 60950 Lightning IEC 61000-4-5 class 3 (2KV), ITU-T K.21
Over The Air Rate:	Up to 35 Mbps (@7 MHz, rates depend on channel size)	Operating Temperature:	-5 C to 55 C
Data Rate:	Up to 18 Mbps average Ethernet rate (@7 MHz)	Antenna:	Integrated antenna and optional window mount
Maximum Tx Power:	+20 dBm (region specific)		
Rx Sensitivity:	Better than -90 dBm @ BPSK 1/2 (based on BER of 1x10e-6)		
Network Attributes:	Transparent bridge 802.1Q VLAN 802.1p, TOS/DSCP and L2/L3 address traffic prioritization DHCP client and DHCP pass-through Dynamic adaptive modulation (bi-directional) Auto select: BPSK, QPSK, 16 QAM, 64 QAM	Interface Options*	
Modulation/Coding Rates:	1/2, 3/4 and 2/3	Ethernet Option	
Coding Rates:	DES and AES	Standard:	10/100 Ethernet (RJ-45)
Over the Air Encryption:	Cell-based PMP deployment	Optional:	4 port mini switch
MAC:	802.16-2004 compliant PMP 802.16-2004 packet convergence sub-layer mode TDMA access Automatic repeat request (ARQ) error correction	Voice Interface Options	
Duplex Technique:	TDD (time division duplex) HD-FDD (Half Duplex Frequency Division Duplex)	VoIP	SIP
Wireless Transmission (PHY):	256 FFT Orthogonal Frequency Division Multiplexing (OFDM)	POTS	1 to 4 FXO/FXS Auto selecting codec with silence suppression

*contact sales for availability



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 10,000 installations in 75 countries across six continents through a global distribution network of 80+ partners.