

RedMAX Subscriber Unit (SU-O)



Features:

- High performance, weather-resistant design
- Simple, quick and economical installation
- Extremely low latency
- Superior non-LOS PMP capability
- Advanced OFDM technology for high reliability
- Dynamic Quality of Service (QoS) settings
- Intel® PRO/Wireless 5116

The RedMAX SU-O is Redline's high performance, WiMAX Forum Certified™ outdoor broadband wireless product designed to WiMAX Forum standards. Certification ensures that the RedMAX SU-O seamlessly interoperates with emerging IEEE 802.16-2004-compatible point-to-multipoint (PMP) equipment.

The RedMAX SU-O is easy and economical to deploy, allowing service providers to quickly provision new service offerings with bandwidth comparable to or greater than xDSL and cable. This outdoor unit, available with fully integrated flat panel antenna, or optional standalone antenna, includes an audible antenna alignment indicator for quick and simple installation. The indoor Power-over-Ethernet (PoE) adapter provides power for the outdoor unit and the user's Ethernet network access port.

Operating in the several RF bands, Redline's built-in 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. Rugged 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-O ensures reliable delivery of delay-sensitive services such as video, voice-over-IP (VoIP), and prioritized data traffic. The RedMAX SU-O supports VoIP interfaces to deliver toll-quality voice and data traffic with service level agreements and guaranteed QoS.

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



RedMAX Subscriber Unit (SU-O) System Specifications

System Capability:	LOS, Optical LOS, non-LOS Cell-based Point-to-Multipoint
RF Band ¹ :	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 +20 dBm (region specific)
Rx Sensitivity:	Better than -98 dBm @ BPSK 1/2 (based on BER of 1x10e-6)
Cable:	Maximum length up to 250 ft (76 m) using Redline recommended shielded outdoor cable
Network Attributes:	Transparent bridge 802.1p, 802.1Q VLAN port tagging 802.1Q, TOS/DSCP and L2/L3 address, traffic classification DHCP client
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 and AES*
MAC:	Cell-based PMP deployment 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)
System Configuration:	SNMP, FTP, CLI
Network Management:	SNMP, standard and proprietary MIBs Full management by RedMAX Management Suite (RMS)
Power Requirements:	PoE-Standard IEEE 802.3af
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:	-40 C to 65 C
Antenna:	Standard: Integrated 14 dBi flat panel Optional: Selection of non integrated high gain antennas
Dimensions/Weight:	8" W x 8" L x 2.5" H (20 cm x 20 cm x 6.35 cm) / 4.5 lbs (2 Kg) not including mounting bracket

Interface Options* Ethernet Option

Standard:	10/100 Ethernet (RJ-45)
Optional:	4 port mini switch

Voice Interface Options

VoIP	SIP
POTS	1 to 2 FXO/FXS



*Contact sales for availability in your region

¹WiMAX Forum certification only applicable to 3.4 - 3.6 GHz

About Redline Communications

Redline Communications is the leading provider of standards-based wireless broadband solutions. Redline's RedMAX™ WiMAX Forum Certified™ systems and award-winning RedCONNEX™ family of broadband wireless infrastructure products 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 35,000 installations in 75 countries, and a global network of over 100 partners, Redline's experience and expertise helps service providers, enterprises and government organizations roll out the services and applications that drive their business forward.

