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# **RedMAX Subscriber Unit (SU-I)**

3.3-3.5 GHz





## **Features:**

- Intel® PRO/Wireless 5116
- Self Install
- Non-LOS PMP capability employing OFDM technology for high reliability
- Dynamic Quality of Service (QoS) settings
- 3.3 3.5 GHz

The RedMAX SU-I is an indoor broadband wireless access product designed to WiMAX Forum™ 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 is easy and economical to deploy, allowing service providers to quickly provision new services with bandwidth comparable to xDSL. This self-install desktop unit features an integrated antenna with signal strength LED's for quick setup.

Operating in the 3.3 - 3.5 GHz band, Redline's integrated 3<sup>rd</sup> 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 video, voice-over-IP (VoIP), and prioritized data traffic. WiMAX-based compatibility, high performance, and easy installation all combine to make the SU-I an excellent choice when deploying wireless broadband for business and residential access.



## **RedMAX Subscriber Unit (SU-I) System Specifications**

System Capability: Non-LOS

Cell-based Point-to-Multipoint

RF Band: 3.3-3.5 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) Up to 23 Mbps (@7 MHz) Ethernet Data Rate: Maximum Tx Power: Up to +20 dBm (region specific) Better than -93 dBm @ BPSK 1/2

Rx Sensitivity: (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 Auto select: BPSK, QPSK, 16 QAM, 64 QAM Modulation/Coding Rates:

1/2, 3/4 and 2/3 Coding Rates: Over the Air Encryption: **DES and AES** 

Cell-based PMP deployment

802.16-2004 compliant PMP

802.16-2004 packet convergence sub-layer mode TDMA access

Automatic repeat request (ARQ) error correction Duplex Technique:

TDD (time division duplex) HD-FDD (Half Duplex Frequency Division Duplex)

256 FFT Orthogonal Frequency Division Wireless Transmission (PHY):

Multiplexing (OFDM)

**Network Connections:** 10/100 Ethernet (RJ-45) System Configuration: SNMP, FTP

Network Management: SNMP, standard and proprietary MIBs

Full management by RedMAX Management

Suite (RMS)

Auto-sensing 110/220/240 VAC 50/60 Hz Available Power Blocks: EMC: EN 301 489-1, EN 301 489-4, Compliance:

EN 55022/CISPR 22: EN 301 753: Safety: IEC 60950-1, EN 60950-1, UL 60950-1;

Industry Canada: RSS-192

Operating Temperature: -5 C to 55 C

Antenna: Integrated antenna and optional window

#### Interface Options\*

#### **Ethernet Option**

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

#### Voice Interface Options

VolP

1 to 2 FXO/FXS POTS



\*Contact sales for availability in your region

### **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 20,000 installations in 75 countries across six continents through a global distribution network of 80+ partners.

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